



CENTURY OF SERVICE

the first 100 years of

**THE UNITED STATES
DEPARTMENT OF
AGRICULTURE**





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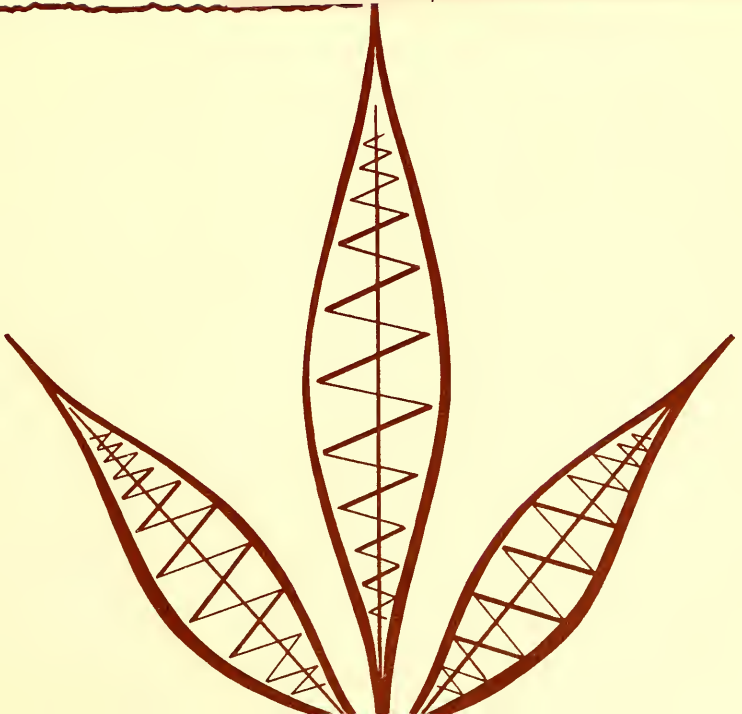
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America's Strength . . .

Agricultural Abundance



CENTURY OF SERVICE

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THE UNITED STATES
DEPARTMENT OF
AGRICULTURE

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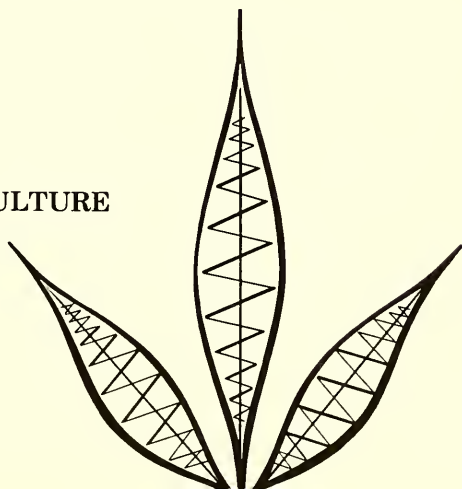
ECONOMIC RESEARCH SERVICE
Agricultural History Branch

CENTURY OF SERVICE

the first 100 years of

THE UNITED STATES
DEPARTMENT OF
AGRICULTURE

CENTENNIAL COMMITTEE
U.S. DEPARTMENT OF AGRICULTURE





Growth Through Agricultural Progress

COMMITTEE ON AGRICULTURAL HISTORY

The Committee on Agricultural History was appointed by the Secretary of Agriculture in Memorandum 1440, to give direction and leadership to a study necessary to the preparation of a history commemorating the Centennial of the United States Department of Agriculture, to establish policies and standards applicable to such a publication, and to provide guidance in its development.

Membership of the Committee is:

Nathan M. Koffsky,
Administrator, Economic Research Service
(Chairman).

Oris V. Wells,
Served as Chairman prior to his retirement as
Administrator, Agricultural Marketing Service.

R. Lyle Webster,
Director of Information.

Foster E. Mohrhardt,
Director of the National Agricultural Library.

James P. Cavin,
Economic Research Service (Secretary).

FOREWORD

ORVILLE L. FREEMAN

Secretary of Agriculture

Agriculture in the United States has progressed from an economy of scarcity to an economy of abundance in the space of a hundred years. This profound change may be measured in a number of ways. For example, less than 9 percent of our labor force is engaged in agriculture today, as compared with 20 to 40 percent in much of Western Europe, over 45 percent in the Soviet Union, and 70 to 80 percent in some parts of the world. Agriculture has contributed labor and capital to the other parts of the American economy, and has been a major force in our economic growth.

Three laws adopted by this Nation in 1862—the act creating the Department of Agriculture, the Homestead Act, and the Morrill Land Grant College Act—have helped the American farmer make invaluable contributions to our agricultural productivity. Illustrations of contributions by the Department of Agriculture appear in *After A Hundred Years: The Yearbook of Agriculture 1962*. Other examples appear in this volume. However, the basic purpose of this history is to outline the Department's organizational development and its response to changing conditions—national and international, scientific and economic.

We have a responsibility to the future, a responsibility which we can best understand if we have a knowledge of our past. Our first responsibility is to the American farmer and the American people. In helping the farmer to meet his responsibility of providing for basic human needs for food and fiber we contribute basically to the high level of living in this Nation. Our responsibility to the American people includes concern for the rest of the world, and the use of our abundance and knowledge to help assure peace and freedom. Our natural resources—land, water, forests—are a responsibility of today and tomorrow.

Yet, numerous and heavy as these responsibilities may seem, they are not new. They have their roots in the past. The United States Department of Agriculture has helped the American farmer meet these responsibilities for the past one hundred years. This is that story. Our past tells us why we can look forward with confidence to the future.

February 1963

Commissioners and Secretaries

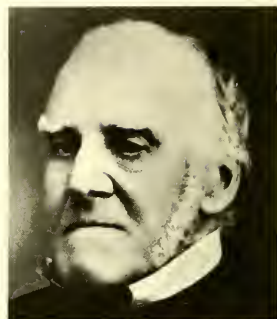
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First Commissioner



HORACE CAPRON
Second Commissioner



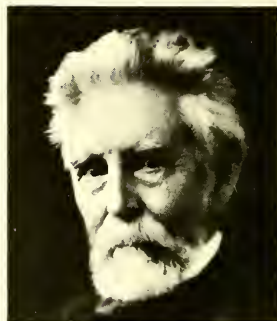
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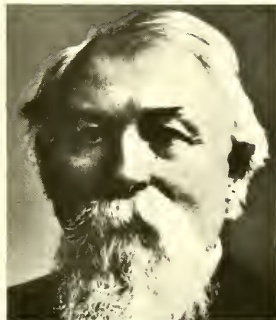
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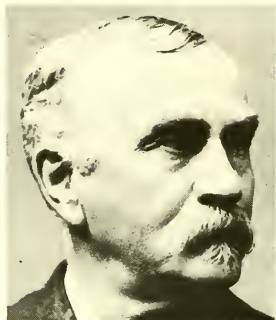
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JAMES WILSON
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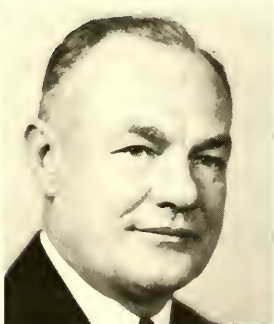
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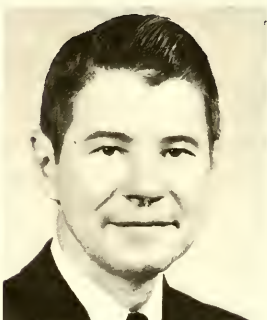
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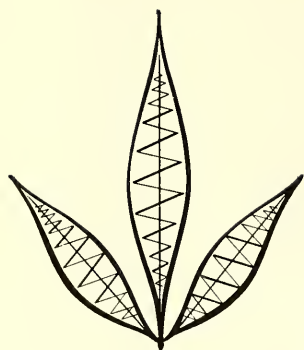
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Fifteenth Secretary



ORVILLE LATHROP FREEMAN
Sixteenth Secretary



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*Abraham Lincoln signed
the act establishing the
Department on May 15,
1862.*

In The Beginning

On May 15, 1862, Abraham Lincoln signed into law an act of Congress establishing "at the seat of Government of the United States a Department of Agriculture." The establishment of the Department was the result of a long series of changes and improvements in American farming. No one person and no one group or organization was entirely responsible for the new Department.

Some agricultural experimentation had taken place in the first permanent English settlements in what is now the United States. First the settlers at Jamestown and then those in Plymouth had learned, with Indian aid, to grow corn. In 1613, John Rolfe of Jamestown experimented with Orinoco tobacco and developed our first export crop. When South Carolina was settled in 1669, experiments were made with a number of tropical crops. The leaders of settlement in Georgia in 1733 not only established an experimental garden, but hired a botanist to collect plants in the West Indies and Central and South America. During the 18th century, other efforts, inspired in part by the agricultural revolution underway in England, were made to improve agriculture.

In spite of both organized and individual efforts, however, little was done to improve the general level of agriculture. At the time of the American Revolution, farming was carried out much as it had been when the first settlements were made. But change was in the air. The Revolution brought an economic and scientific as well as a political awakening to the people of the new United States.

Many leaders of the new nation, like 90 percent of the entire population, lived on farms and were dependent upon agriculture for a livelihood. In several States leading gentlemen farmers and planters formed societies dedicated to agricultural improvement. The Philadelphia Society for Promoting Agriculture and the South Carolina Society for Promoting Agriculture and Other Rural Concerns, both organized in 1785, were the first such groups.

The members of the new societies were usually able men with inquiring minds who were particularly interested in adapting some of the English advances in farming to American conditions. They were interested in systems of farming rather than in specific results with a designated crop. The Philadelphia Society numbered among its corresponding members Thomas Jefferson and George Washington (82).¹

Agriculture was to Jefferson a way of life that developed social virtues limited to tillers of the soil. As a statesman, his policy was to encourage and aid the farmers. As a planter, Jefferson made his home, Monticello, a practical experimental farm. He tried new methods, new machinery, and new crops, but he never lost sight of the aim to make his landholdings profitable.

Mount Vernon, Washington's home, also became a veritable experimental farm. George Washington exemplified the spirit of scientific research in his attitude toward agriculture. He worked to conserve his soil, diversified his crops, and pioneered in using new machinery. He was America's first mule breeder, and greatly improved his sheep. The advances in England interested Washington, and he kept in close touch with them through correspondence with two English farm leaders, Arthur Young and Sir John Sinclair (64).

Proposals for a Federal Agricultural Agency

Both Young and Sinclair were vitally involved with the English Board of Agriculture, established in 1793 to survey the conditions of British agriculture and advise farmers. Young was the first secretary and Sinclair the first president of the board. In 1794, Washington commented to Sinclair on the value of the county surveys being sponsored by the board. When Sinclair heard of Washington's pending retirement from the Presidency 2 years later, he urged his friend to recommend

... some agricultural establishment on a grand scale, before you quit the reins of government. By that, I mean a Board of Agriculture, or some similar institution . . . with societies of agriculture in the capital of each State, to correspond with it.

Washington was impressed by Sinclair's suggestion, and asked John Jay and Alexander Hamilton for advice. Then, on December 7, 1796, in his last annual message to Congress, Washington urged the creation of a board of agriculture in the following language:

It will not be doubted that with reference either to individual or national welfare agriculture is of primary importance. In propor-

tion as nations advance in population and other circumstances of maturity this truth becomes more apparent, and renders the cultivation of the soil more and more an object of public patronage. Institutions for promoting it grow up, supported by the public purse; and to what object can it be dedicated with greater propriety? Among the means which have been employed to this end none have been attended with greater success than the establishment of boards (composed of proper characters) charged with collecting and diffusing information, and enabled by premiums and small pecuniary aids to encourage and assist a spirit of discovery and improvement.

Thus, the first formal proposal for the establishment of a Federal agency devoted to agriculture came from George Washington. Both the Senate and the House of Representatives indicated interest, the House naming a committee to consider the matter. The committee, on January 11, 1797, recommended the creation of The American Society of Agriculture, with a secretary paid by the Government, and a board elected by the membership. The society was to encourage experiments and discoveries, undertake a statistical survey of the United States, and collect and publish information on agriculture. The proposal as embodied in a bill never came to a vote. Nevertheless, the objectives and duties proposed in this first bill were very similar to those finally adopted for the Department of Agriculture.

While Washington's proposal did not become law, societies similar to the Philadelphia and South Carolina groups continued to urge improved agriculture. At the same time, agricultural fairs were beginning and the first periodical devoted to agriculture, *The Agricultural Museum*, made its appearance in 1810.

Cattle fairs had been known in colonial times, but they were more properly called cattle markets. This was also true of the fairs held in the District of Columbia in 1804-05. In 1802, George Washington Parke Custis began a yearly series of sheepshearing contests and exhibitions of sheep and wool at his Arlington estate. Custis also was interested in establishing a national agricultural organization to be supported in part by the Government. In 1809, Custis and others organized the Columbian Agricultural Society, which held six semiannual exhibitions before going out of existence in 1812.

Woolgrowers were much interested in the merino sheep of Spain, particularly since the Spanish Government was permitting the export of a few. In 1807, Elkanah Watson, merchant, banker, and farmer, exhibited two merinos in the public square at Pittsfield, Mass. So much interest was aroused that Watson organized a local fair and cattle show in 1810, and a local society called the Berkshire Agricultural Society in 1811. The primary purpose of the local society and the many others modeled on it was to sponsor local fairs. Within a few years, several States were aiding such societies (161).

These developments encouraged Watson and others to urge the establishment of State and National boards of agriculture. Such

urgings were successful in a number of States. In 1816, Elkanah Watson drew up a petition asking

... that the aid of the National Government may be extended to the promotion of the interests of agriculture and manufacturing, either by the establishment of a national board, or by such means as in the wisdom of Congress may seem meet and proper.

The petition was presented to the House of Representatives on January 29, 1817, by John W. Hulbert of Massachusetts. The House then referred the petition to a special committee, of which Hulbert was chairman. The committee reported a bill establishing a board of agriculture on February 21, but it never came to a vote. It was reported to be opposed by President Madison on constitutional grounds and by others as extending too greatly the functions and expenditures of the Government. However, the House of Representatives created a Committee on Agriculture on May 3, 1820, and the Senate followed in 1825. In the latter year, President John Quincy Adams proposed legislation to aid farmers, but Congress took no action.

Local and State societies and agricultural journalists continued to promote better farming. These efforts had much to do with the eventual establishment of the Department.

Importation of Plants and Livestock

At the same time, the executive branch of the Federal Government had been aiding farmers by encouraging the importation of improved plants and livestock. Jefferson, for example, while traveling in Italy in 1787, procured the seed of upland rice and sent it to the United States in violation of Italian law. He also urged Americans to cultivate olives and offered to secure plants.

Other representatives abroad sent both plants and animals back to America. In 1818, Elkanah Watson sent personal circulars to American consuls all over the world, asking them to send him seeds for distribution. This may have spurred the Government to activity along similar lines. On March 26, 1819, Secretary of the Treasury William L. Crawford, in a circular letter largely devoted to other matters, pointed out to consuls the importance of introducing new plants or superior varieties of old. He requested the consuls to send such plants to the customs collectors at United States ports for distribution.

In 1827, President John Quincy Adams directed Secretary of the Treasury Richard Rush to issue another consular circular on the subject. A circular, dated September 6, 1827, was sent to consuls abroad and to captains of Navy ships (126). During the next 2 years, the Secretary of the Treasury sent several lots of seeds to the Columbian Institute, a learned society established in 1816, for distribution.

The Patent Office and Agriculture

The directives of 1819 and 1827 resulted in some seeds being introduced and distributed, but the action that led finally to a sustained governmental program on behalf of agriculture was the appointment of Henry Leavitt Ellsworth as Commissioner of Patents. Ellsworth, a Connecticut-born lawyer and businessman, had been appointed Commissioner of Indian Affairs in 1832. During his travels in connection with this job, he became intrigued with the agricultural possibilities of prairie lands and bought large tracts in Indiana and other prairie States. Ellsworth became Commissioner of the newly established Patent Office in 1836, and his interest in improving agriculture was greatly stimulated by the many new agricultural implements that were being patented. Ellsworth also had been in touch with Elkanah Watson and his activities (230, pp. 23-25).

Shortly after assuming his post in the Patent Office, Ellsworth began to promote agricultural interests, even though he had no legal authority for such activities. He collected "new and valuable varieties of seeds and plants" from many sources, including consuls and naval officers. The seeds and plants were then distributed through Congressmen and agricultural societies.

In his report as Commissioner of Patents for 1837, Ellsworth recommended that a public depository be established for collecting and distributing seeds and plants (344, 1837, pp. 4-6). He also proposed, in a letter dated February 22, 1838, that Congress appropriate \$5,000 for the work. Ellsworth's recommendations and a resolution on the subject introduced March 5, 1838, were referred to the Committee of Agriculture of the House of Representatives. On March 7, 1838, Congressman Joseph F. Randolph, of New Jersey, reported for the committee in favor of the project and introduced a bill to make the appropriation and employ "a clerk to be denominated the agriculturist at \$1,600 and two laborers." The committee pointed out that many seeds and plants sent in response to the circular of 1827 had been lost to the country (275, pp. 2-3). However, the bill did not pass.

The failure of the bill did not keep Ellsworth from continuing to distribute seeds and urge further aid to agriculture. Although he reported the work was being done at his own expense, Ellsworth was criticized on the grounds that he was acting without authority.

On January 21, 1839, the chairman of the House Committee on Patents wrote to the Commissioner asking for information "relative to the collection and distribution of seeds and plants; also the practicability of obtaining agricultural statistics." This was, no doubt, intended to give Ellsworth an opportunity to ask Congress for an appropriation as well as to justify his actions.

In his reply, Ellsworth pointed out the value of distributing seeds, citing farmers' experiences with certain varieties of corn

and wheat which he had distributed; he expressed a willingness to collect and report agricultural statistics. The availability of statistics would aid farmers in marketing their crops and enable them to take some of the profits going to speculative monopolists. Ellsworth asked for a small appropriation from the patent fund, that is, the money paid by applicants for patents, to cover expenses, most of which he had been paying personally (344, 1838, pp. 57-59).

Congress responded to the request by appropriating \$1,000 from the Patent Office fund on March 3, 1839. The fund was to be used for "the collection of agricultural statistics, and for other agricultural purposes."² The appropriation, unlike present-day appropriations, was available until it was spent, and no further appropriation was made for 1840 or 1841.

In 1839, the Patent Office spent \$126.40 on statistics and seeds; in 1840, \$451.58; and in 1841, \$125. Little of the money was spent on statistics since agricultural questions were included, for the first time, in the Census of 1840. More than 30,000 packages of seed were distributed in 1840, most of them under Congressional frank.

In his annual report for 1841, Ellsworth stated that "the plan of making a complete collection of agricultural implements used, both in this and foreign countries, and the introduction of foreign seeds, are steadily pursued." Science, particularly chemistry, the report specified, should be brought to the use of agriculture; for example, analyzing soil and extracting oil and sugar from corn might mean much. The Commissioner suggested that a "single clerk" be appointed to collect agricultural statistics.

Congress endorsed Ellsworth's work by appropriating \$1,000 in 1842 and \$2,000 each year in 1843 and 1844. In 1845, \$3,000 was appropriated, but nothing was granted in 1846. Thereafter, yearly appropriations were made, although beginning in 1847 the money was appropriated from the general fund of the Treasury rather than from the Patent Office fund.

The increased appropriations came largely because Ellsworth kept emphasizing the value of his work and urging its expansion. In 1842, he urged "the constitution of an agricultural bureau, or at least an agricultural clerkship." He also pointed out that funds to permit him to make observations in the farming areas of the various States would enable him to better evaluate the statistics collected.

The agricultural reports for 1842, 1843, and 1844, the last issued under Ellsworth's direction, were popular with the Congress and with many people if the demand for extra copies by Congressmen is an indication. Each report was a substantial volume, filled with agricultural statistics, extensive reports on major crops, essays on topics of farm interest, and letters from correspondents. Many of the problems discussed—the cotton surplus, for one—have a familiar ring today.

Commissioner Ellsworth was assisted in his agricultural work by a German-trained agriculturist, Charles Lewis Fleischmann. Fleischmann prepared a number of reports for the annual agricultural reports of the Patent Office. He also wrote a report on sugar-beets that was well received, sent a series of memorials to Congress urging Government assistance to agriculture, and prepared a comprehensive report on agricultural conditions in Europe. The last was not completed until Fleischmann, like Ellsworth, had resigned from the Patent Office in 1845 (85).

In 1845, Ellsworth was succeeded as Commissioner of Patents by Edmund Burke. The new Commissioner was a native of Vermont and had served as a Representative in Congress of New Hampshire, where he had a law practice. His report for 1845 was similar in content and organization to those for preceding years. Commissioner Burke pointed out the value of the work being done, and requested that more substantial appropriations be made from the general funds of the Treasury. The increase would permit a greater effort to be made in collecting valuable seeds and plants and would result in the publication of more accurate and reliable statistical information. As alternatives to more aid in collecting statistics, Burke suggested that the States might require statistical reports or that voluntary associations of citizens might be formed to collect all kinds of statistics.

These proposals, combined with other recommendations regarding the issuance of patents, led to legislation being introduced into Congress. This, in turn, resulted in Senate debate regarding the agricultural work on July 1, 1846. Senator Sevier of Arkansas urged that the section of the bill permitting the Patent Office to carry on agricultural work be eliminated. Senator Cameron of Pennsylvania stated that the agricultural reports were worth while, while Senator Ashley of Arkansas pointed out the value of agricultural statistics to the farming classes. Senator Sevier returned to the attack, characterizing the agricultural report as "comparatively worthless" and an "accumulation of newspaper paragraphs." Much merriment was excited during the discussion when Senator Benton of Missouri listed the "flash" or exaggerated names under which the Patent Office circulated seeds.

Correction of the abuses, according to Senator McDuffie of South Carolina, lay in discontinuing the appropriations, while Senator Calhoun of South Carolina denounced the work as "one of the most enormous abuses under this Government." Senators Phelps of Vermont and Davis of Massachusetts opposed eliminating the work, but Senator Mangum of North Carolina said that "practical farmers turned up their noses with utter scorn and contempt" at the agricultural report. Similar views were expressed by Senators Westcott of Florida and Atherton of New Hampshire. The debate came to an end when Senator Yulee of Florida reported that the Commissioner of Patents had authorized him to say that he would be glad to be released from the job (270, *July 1, 1846*).

The Senate recommitted the bill by a vote of 26 to 18. The major result was that no appropriation was made for 1846, so no agricultural report was issued. The next year, \$3,000 was appropriated from the patent fund for the collection of agricultural statistics and other purposes, with the restriction that the agricultural portion of the Commissioner's report was not to exceed 400 pages. Appropriations were made from the patent fund until the passage of a deficiency appropriation act on May 31, 1854. In addition to regular yearly appropriations, Congress appropriated varying amounts for special purposes from time to time. For example, in 1848, \$1,000 was appropriated for "chemical analyses of vegetable substances produced and used for the food of man and animals in the United States."

On March 3, 1849, the Patent Office became part of the newly created Department of the Interior. Shortly thereafter, Thomas Ewbank, a New York manufacturer, became Commissioner of Patents. Perhaps partly to offset a number of protests by publishers of agricultural journals with respect to the annual report on agriculture, Daniel Lee, editor of the *Genesee Farmer* in New York and professor of agriculture at the University of Georgia, was employed to prepare the report (100, pp. 21-22).

Late in 1852, Silas Henry Hodges of Vermont was appointed Commissioner, and was succeeded early in 1853 by Charles Mason, an Iowa lawyer. Mason was capable and interested in agriculture, but was overshadowed by Daniel Jay Browne, who served as Agricultural Clerk from June 1853 to October 1859.³ Browne had been a prolific writer on agricultural and scientific subjects before joining the Patent Office. He secured and distributed distinctive seeds, increased the statistical material published, and used many original articles in the annual report. Browne was strongly criticized by the agricultural press. The *American Agriculturist* denounced his seed distribution and set up its own system. Daniel Lee, his predecessor, commended his seed work in the *Southern Cultivator* but was critical of his writings on agricultural subjects.

On June 14, 1854, Townend Glover, an entomologist, was appointed "for collecting statistics and other information on seeds, fruits and insects." A contribution by him appeared in the 1854 report.

Congress broadened the language of the agricultural appropriation in 1856 to make the funds available for "the collection of agricultural statistics, investigations for promoting agriculture and rural economy and the procurement and distribution of cuttings and seeds." In the same year, a 6-acre tract between 4½ and 6th Streets and Missouri Avenue was set aside for work with sorghums; 2 years later it was formally designated the propagating garden.

Mason was succeeded as Commissioner by Joseph Holt of Kentucky in 1857. Holt invited a number of leading citizens interested in agriculture from most of the States and territories to meet in

Washington on January 3, 1859. The group organized itself as an "Advisory Board of Agriculture of the Patent Office," and spent 8 days reviewing the agricultural work and making suggestions for its improvement. Among other activities, the group revised the questionnaire used by the Patent Office for getting information from farmers so that it included 1,710 questions, classified by different crops and animals.

The advisory group's activities led to criticism in Congress, the passage of a resolution in the House of Representatives demanding an explanation, and a cut in appropriations. The language of the appropriation forbade its use in meeting the expense of the advisory board or similar groups. Commissioner Holt resigned. He was succeeded in rather rapid succession by William D. Bishop of Connecticut, Philip F. Thomas of Maryland, and David P. Holloway of Indiana (230, pp. 30-33).

In 1860, the agricultural work of the Patent Office was placed under the direction of Thomas G. Clemson, a prominent scientist and agriculturist. Clemson is perhaps best remembered today as the son-in-law of John C. Calhoun and the donor of the Calhoun homestead to the State of South Carolina for the establishment of Clemson College. In 1861, Clemson was succeeded as Superintendent of Agriculture by Isaac Newton of Pennsylvania, who subsequently became the first Commissioner of Agriculture.

In the 24 years that the Patent Office was responsible for governmental activity with respect to agriculture, the collection and distribution of seeds, some valuable and some not, and the collection and publication of information, some useful and some not, had been its major accomplishments. A beginning, but only a beginning, had been made in scientific work. While collecting agricultural statistics had been authorized, and, indeed, emphasized, no effective system had yet been devised for accomplishing this objective. Among other suggestions, one by Matthew Fontaine Maury in 1856 that volunteer weather observers also report on the state of crops with their monthly weather record attracted some attention but was never put into effect (145).

Further Suggestions for a Department

The agricultural activity of the Patent Office in no way diminished suggestions throughout the period that the farmer should be recognized by a department devoted to his interests. In 1838, when Ellsworth was asking Congress for an appropriation for seed distribution, a group of Kentucky citizens petitioned Congress for the establishment of a "Department of Agriculture and Mechanics." In 1840, another group asked Congress to establish a "Department of Agriculture and Education." This petition was referred to the

House Committee on Agriculture, which returned an unfavorable report 2 years later (270, Apr. 21, 1842). In 1847, an article appearing in *De Bow's Commercial Review*, published in New Orleans, urged the creation of a national board of agriculture.

After the establishment of the Department of the Interior in 1849, many groups and individuals urged the creation of an agricultural bureau within the new Department, and bills for the purpose were introduced into both Houses of Congress. This idea, a compromise between the demands for a separate department and continuation of the Patent Office programs, was endorsed by President Zachary Taylor in a message to Congress on December 4, 1849. His successor to the Presidency, Millard Fillmore, favored an agricultural bureau in messages to Congress in 1850, 1851, and 1852 (345, vol. 5, pp. 18, 85, 128, 178). During the next 10 years, the question of establishing either a bureau or department devoted to agriculture kept recurring.

The United States Agricultural Society, established in 1852, had much to do with keeping the question before the public. A previous national society, the Agricultural Society of the United States, had been organized in 1841 and had come to an end within a year. The new society had a stronger base. The Massachusetts Board of Agriculture, through its president, Marshall P. Wilder, had been instrumental in getting the new society underway, and Wilder became its president. The Maryland Agricultural Society, under the leadership of Charles B. Calvert, lent its support, as did many other State and local agricultural societies and prominent individuals.

The Maryland Agricultural Society had passed a resolution as early as October 11, 1849, suggesting the creation of a bureau or department of agriculture. On February 4, 1852, the society passed a resolution favoring the establishment of a Department of Agriculture with Cabinet status. This action was reversed 2 weeks later apparently when Calvert was absent. However, Calvert remained firm in his advocacy of a Department of Agriculture.

At the first meeting of the United States Agricultural Society on June 2, 1852, Calvert and others urged that the group take a stand for the establishment of a Department of Agriculture, headed by a Cabinet officer. Strong opposition, led by Senator Stephen A. Douglas of Illinois, led to abandonment of the proposed resolution. However, at the next meeting on February 2, 1853, a resolution offered by Calvert calling for a Department of Agriculture headed by a Cabinet officer was adopted unanimously. Thereafter for the next 5 years the society continued to urge Congress to establish the new Department (46).

In 1856, a resolution endorsing a bill to grant land to the States for agricultural colleges was brought before the society. Action was deferred until 1857, when the resolution was endorsed. A bill for this purpose was being considered by Congress when the society held its annual meeting in 1859. Calvert stated at the

meeting that the bill for a department had made no progress and further emphasis might endanger the land-grant college bill. The society therefore did not act with respect to a department, but did endorse the college bill, which passed soon thereafter and was vetoed by President Buchanan.

In 1860, the society endorsed the establishment of a Bureau of Agriculture in the Department of the Interior, but also appointed a committee, headed by Calvert, to consider the need for a department headed by a Cabinet officer. Thereafter, the society continued to urge a department.

On January 11, 1860, William D. Bishop, then Commissioner of Patents, asked that Congress take the agricultural work out of the Patent Office because of the want of congruity and the workload. Bishop's successor, Philip F. Thomas, wrote on May 12, 1860, that he was willing to continue the work. However, it seemed obvious that a change would be made. The question was whether the work would be carried on by a new department or by a new bureau in the Department of the Interior.

In 1861, Thomas G. Clemson, then Superintendent of the Agricultural Division of the Patent Office, proposed in his annual report that the Congress establish a Department of Agriculture

. . . separate and apart from all influences other than those prompted by the highest regard for the public good, unobtrusive in its conduct as in its nature, and having truth for its object. It should endure untrammelled, and free from all partisan considerations. It should know no section, no latitude, no longitude.

He pointed out that all civilized nations had fostered agriculture by the "bestowment of bounties," restrictions upon foreign competition, and educational encouragement which only governments could offer. In a farsighted discussion, Clemson then proceeded to list the types of work which should be carried out by an independent department.

Those interested in establishing a department had to overcome the traditional fears of centralized control, exaggerated at this time by the sectional conflict. However, the withdrawal of the Southern Senators and Representatives with secession permitted the Republican Party to carry out its pledges for agrarian reform by passing bills establishing the Department of Agriculture, giving land for colleges of agriculture and mechanical arts, and giving homesteads to settlers (189).

The new Secretary of the Interior, Caleb B. Smith, recommended in his report for 1861 the establishment of a "Bureau of Agriculture" within the Interior Department. President Lincoln agreed with this proposal, and in his message to Congress, December 3, 1861, recommended the establishment of an agricultural and statistical bureau. A bill carrying out the President's recommendation was introduced into the House of Representatives by Owen Lovejoy of Illinois, chairman of the Committee on Agriculture, on January 7, 1862. The bill was referred to the Committee on

Agriculture, of which Charles B. Calvert was a member. Just 2 days after the bill was introduced, the president of the United States Agricultural Society urged farmers to petition Congress until a Department of Agriculture headed by a Cabinet officer was established.

The Committee on Agriculture reported a compromise bill to the House on February 11, 1862. It created a separate department but put a commissioner, to be appointed by the President, at its head. In a discussion of the bill on February 17, 1862, Lovejoy presented the report of the Committee on Agriculture, which answered one of the basic arguments that had been raised against the bill. Opponents had said that if provision was made for agriculture, something should be done for manufacturing, commerce, and other economic groups. Lovejoy agreed that in most countries these interests were represented in the government by a distinct bureau or minister. On the other hand, in the United States the commercial and manufacturing interests, being centralized, could easily combine and make themselves felt in the legislature and in the executive departments of the Government (270, *Feb. 17, 1862*).

The compromise bill was passed with minor amendments and sent to the Senate, where it was referred to the Committee on Patents and the Patent Office. The proposal went through several changes in the Senate, and a bill providing for a bureau rather than a department failed with a tie vote. Senator Hale of New Hampshire stated that agriculture did not want of any assistance, and that if a department were established, it would be headed by a Secretary before long. Senator Cowan of Pennsylvania spoke of the agricultural work as mischief which had been gradually accumulating until it swallowed up half a million dollars of the people's money for nothing (270, *May 8, 1862*).

Upon the defeat of the proposal for a bureau, the compromise bill, providing for a separate department headed by a Commissioner appointed by the President, was passed by a vote of 25 to 13 in spite of such objections. The compromise bill then went back to the House, where the Senate amendments were accepted. President Lincoln signed the bill on May 15, 1862. Thus, the United States Department of Agriculture was established by law while the Civil War was being fought to test the existence of the Federal Union.

¹ Italic numbers in parentheses refer to Literature Cited, page 419.

² 5 Stat. 353.

³ Remey, C. M., ed., *Life and Letters of Charles Mason, Chief Justice of Iowa, 1804-82, 1939*, typewritten copy, vol. 2, p. 192 (in Library of Congress).

“There Is Hereby Established”

The citizens of the District of Columbia paid little attention to news on July 1, 1862, that Isaac Newton had taken his oath as first Commissioner of Agriculture. The daily papers mentioned his confirmation by the Senate on June 30, 1862, but other matters received more attention. Union forces under the command of George B. McClellan were battling the Confederates under Robert E. Lee before Richmond, and news of the fall of that city was expected within a matter of hours. A dealer in St. Louis had been arrested for selling “secession” music. Long columns in the newspapers were filled with lists of wounded soldiers in Washington hospitals, while others offered rewards for the capture of runaway slaves from Maryland. The Department of Agriculture was born in perilous times.

Congress had stated in the new law :

... there is hereby established at the seat of Government of the United States a Department of Agriculture, the general designs and duties of which shall be to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word, and to procure, propagate, and distribute among the people new and valuable seeds and plants.

The act further directed

... the Commissioner of Agriculture to acquire and preserve in his Department all information concerning agriculture which he can obtain by means of books and correspondence, and by practical and scientific experiments (accurate records of which experiments shall be kept in his office), by the collection of statistics, and by any other appropriate means within his power; to collect, as he may be able, new and valuable seeds and plants; to test, by cultivation, the value of such of them as may require such tests; to propagate such as may be worthy of propagation, and to distribute them among agriculturists.¹

This law, very broad in scope, was to remain the basic authority of the Department for its first 100 years.

After President Lincoln signed the bill on May 15, 1862, he received much unsolicited advice, particularly in the columns of the

farm press, on the appointment of the first Commissioner of Agriculture. Some urged the appointment of a distinguished scientist, others an outstanding "practical" man. A few periodical editors were certain that one of their number would be the best choice. However, Lincoln turned to Isaac Newton, a farmer who had served as Chief of the agricultural section of the Patent Office since April 1861.

Newton was born in Burlington County, N.J. He grew up on a farm and, after completing his common school education, became a farmer in Delaware County, Pa., near Philadelphia (214). Newton was a successful, progressive manager, whose farms were regarded as models. He also developed a pioneer dairy lunch in Philadelphia and a select butter trade as outlets for his farm products. Newton sent butter each week to the White House, and he and his family maintained a close friendship with the Lincolns.²

Isaac Newton thus brought to the new post of Commissioner of Agriculture the virtues and handicaps of a self-made man, who had demonstrated his abilities as a practical farmer and businessman. His appointments to important positions did much to shape the future course of the agency.

Objectives of the New Department

As outlined in his first report, Newton's objectives were adapted from suggestions made by Jesse Buell, editor of the *Cultivator*, 20 years earlier. These were: (1) collecting, arranging, and publishing statistical and other useful agricultural information; (2) introducing valuable plants and animals; (3) answering inquiries of farmers regarding agriculture; (4) testing agricultural implements; (5) conducting chemical analyses of soils, grains, fruits, plants, vegetables, and manures; (6) establishing a professorship of botany and entomology; and (7) establishing an agricultural library and museum. These objectives were similar to the authorities outlined by Congress in establishing the Department.

Newton met his first objective of publishing useful agricultural information by continuing the annual reports on agriculture that had been started in the Patent Office, by inaugurating monthly reports in 1863 that were continued to 1876, and by publishing circulars and bulletins from time to time. Some of these publications, particularly the annual and monthly reports, were distributed in large quantities by Congress. Many farm journals were indignant at the issuing of regular reports, which, they felt, made a tax-supported agency a direct competitor of private business. The journalists extended their attacks from charges of unfair distribution to declarations of unreliability of the various reports.

The demand for systematic statistical work, which had been discontinued by the Patent Office in 1849, had helped to bring about the establishment of the Department. Newton's first annual report as Commissioner contained production statistics based on the 1860 census and data on exports. This material was prepared by Jacob Richards Dodge, who signed an oath of office as a clerk in the Department of Agriculture on July 22, 1862. Early in 1863, Lewis Bollman, a farmer, teacher, and journalist, was appointed statistician. He left in 1865 and was succeeded by Dodge. Except for a period of 4 years from 1879 to 1883, Dodge continued in the position until March 31, 1893.

The early statistical reports, which, beginning July 10, 1863, were published monthly during the summer and bimonthly during the winter, were developed from voluntary reports from crop correspondents in each county. The first reports contained data on conditions of crops and the weather. Regular monthly reports on crop conditions and annual reports on acreage, yield per acre, and production of important crops and numbers of livestock on farms were begun in 1866. In January 1867, the first annual report on the prices of farm products was issued, covering prices for 1866. It marked the real beginning of a continuous series of agricultural statistics under the direction of the Department (259, p. 4).

The Commissioner relied upon the time-honored device of appealing to United States consuls abroad for assistance in introducing seeds and plants. He obtained some valuable seeds, but emphasis was upon exotic plants, not only during Newton's administration but for many years later.

The appointment of William Saunders as Superintendent of the Department's propagating garden in 1862 was Newton's most important contribution to plant work. Saunders had been trained in horticulture at the University of Edinburgh and, after 1854, became one of Philadelphia's most prominent landscape gardeners. In his new job, Saunders rarely fell into the error of concluding that a new variety of useful plant was necessarily more valuable than the tried and proven varieties, or that, merely because a plant was useful and could be grown in the United States, it should be grown here in spite of uneconomic conditions for its production.

Saunders and Newton, however, faced a situation in 1862 where, because of the Civil War, the uneconomic production of certain crops seemed justified. During the years of conflict, particular attention was given to attempts to grow cotton in the North and to find a substitute for it among such fibers as hemp and flax. Sugar, too, had been a southern product, and efforts were made to secure it from sorghum and sugarbeets. Some of this work was carried out in the propagating garden.

The Department was assigned a plot of ground now bounded by 12th and 14th Streets SW., and Constitution and Independence Avenues, in Washington as an experimental farm. The land was

used by the War Department as a cattle yard during the Civil War, but it was turned over to the Department in April 1865. Sorghum, wheat, rye, and several other grains and vegetables were grown on the plot.

While the Department worked with cotton and sugar during the war, Newton apparently saw that agricultural self-sufficiency and renewed prosperity were impossible without reunion. At the conclusion of the conflict, he undertook several projects aimed at assisting Southern agriculture, an attitude shared by succeeding Commissioners (183, pp. 71-80).

In January 1866, the Commissioner sent Oliver H. Kelley, a Minnesota farmer active in Republican politics, on a tour of the Southern States to gather information on agriculture. Several of Kelley's suggestions for aiding Southern farmers were carried out by Newton. Kelley also had an idea for helping all farmers in the Nation through a fraternal order for husbandmen and their families. He persuaded William Saunders and a group of others in Washington to join him in organizing the Patrons of Husbandry, better known today as the National Grange (121).

Chemical analysis was regarded by many scientists and educated farmers as the scientific answer to farm problems; little was done in testing agricultural implements until later. In 1840, Justus von Liebig had published his monumental work on agricultural chemistry, which made science, particularly chemistry, the servant and salvation of the farmer. Even earlier, Ellsworth had urged that agricultural chemistry be encouraged by the Patent Office, and a certain amount of chemical analysis had been carried out. Accounts of this work had appeared in the Patent Office reports. It was evident that the science would play a major role in the new Department.

Even before "A. Lincoln" had affixed his signature to the bill establishing the Department, friends of Charles M. Wetherill were urging his appointment as chemist. Wetherill had studied with Liebig and had conducted independent research. He was offered the post and accepted, starting work in the Department in October 1862. Grapes and various types of sugar were first analyzed, but after a few months, President Lincoln asked Wetherill to study gunpowder for the Army and, a few months later, suggested that his salary be increased. However, Newton apparently was so irritated at Wetherill's absence from the Department that he dismissed him (207). The new chemist, Henri Erni, trained in Switzerland, served 2 years. He was replaced by Thomas Antisell, who had been a chemist in the Patent Office. During Antisell's years in the Department he worked mainly with soils, grapes, wines, sugars, and minerals.

The sixth objective of the new Department was the establishment of a professorship of botany and entomology. Work in these fields had been carried on in the Patent Office by Townend Glover from 1854 to 1859; he resigned in 1859 because of disagreements

with Daniel Jay Browne. Newton brought Glover back as entomologist on April 1, 1863, and he served until 1878. Glover carried out many projects discussed in the annual reports of the Commissioner. He published fragments of a work that was to be known in its entirety as "Illustrations of North American Entomology," printed from plates he had engraved. Important parts were issued from 1872 to 1878, but the whole work was never completed (62).

Glover was interested in establishing a museum, and received encouragement from the Commissioner, as it met one of his objectives for the Department. Before coming to the Department, Glover had prepared meticulous models of fruits, and added many new items to his collections while working in the Department and the Patent Office. This material formed the basis of the agricultural museum, established by Commissioner Newton on August 1, 1864, with Glover as curator. The Federal Government purchased Glover's private collections in 1867, and the museum was moved into the new building of the Department completed in 1868. The museum increased in importance for some years, but in 1905 it was abandoned; exhibits deemed worthy of preservation were taken over by the Smithsonian Institution and various other interested bureaus (37).

As his last objective, Newton pointed out the need for a library. The book and journal collection of the Agricultural Division of the Patent Office, comprising about 1,000 volumes, was transferred to the new Department. Appropriations for library materials began in 1864. The first librarian of record was Aaron Burt Grosh, a clergyman. Little is known of his library work; he is best remembered, together with Kelley and Saunders, as one of the founders of the National Grange (154).

Thus, within a brief period of years, the Commissioner had taken steps toward the realization of most of the goals he had outlined for the new Department. Most important, despite difficulties with some of them, he brought a group of able and scholarly men into the Department. As Warner W. Stockberger, the Department's first authority on personnel administration, so aptly said:

This group formed the vanguard of that long line of professionally trained and scholarly men who, in turn, succeeded to positions of leadership in their respective branches of the Department. With few exceptions they have been devoted to high standards of excellence in the discharge of their duties and have displayed a minimum of interest in preferment through political influence. Coming as they did very largely from the colleges and universities and in numbers which increased from year to year, they have permeated the Department with the ideas and ideals acquired through higher education and have transferred to it no small portion of the concern for human welfare and academic freedom usually associated with the campus. The results of their firm implantation of the principles of experimentation and research are reflected in the open-minded and progressive attitudes with which the Department is justly credited (322, pp. 5-6).

The first offices of the Department were in the basement of the Patent Office building, which 100 years later would be occupied by the Civil Service Commission. As early as 1863, Newton urged the erection of a new building, and in 1867 Congress appropriated \$100,000 for the purpose. The building, located near the present Administration Building, was completed in 1868. Commissioner Newton did not live to see its completion—he died June 19, 1867. Though accounts of the cause of his death vary, his official obituary, prepared by John W. Stokes, Newton's nephew and Chief Clerk of the Department, indicates that the direct cause was his devotion to duty. One hot July day in 1866, according to Stokes, Newton heard a thunderstorm approaching. He hurried to the experimental farm, about a mile away, to see that samples of wheat, then being harvested, were protected from the rain. The exertion and heat brought on sunstroke from which the Commissioner never recovered.

Capron as Commissioner

For a period of about 6 months, from June 20, 1867, to December 4, 1867, John W. Stokes served as Acting Commissioner of the Department. President Johnson filled the vacancy by appointing Horace Capron from a field of about 30 active applicants. Capron, a native of New England, had been a successful farmer and manufacturer in Maryland, an officer in the Union army, and a noted stock breeder in Illinois (189).

The prolonged illness of Newton and the delay in appointing his successor made it necessary for Capron to take a number of vigorous actions when he became Commissioner in order to make the Department as useful as possible. In his annual report for 1867, Capron stated that he had undertaken a reform of the seedroom, which resulted in the discharge of several employees. Capron also abolished the experimental farm—it was too small for effective use, particularly as part of it was being used for the new office building. Stokes suggested that the grounds be developed as an arboretum, and this proposal was adopted.

The new Commissioner was not opposed to seed distribution, but he felt that the seeds should be "new and valuable," as directed in the act of 1862. During the next few years, Capron, with the aid of William Saunders, made a definite effort to meet this requirement, and established a system for the exchange of seeds and plants with foreign countries. Capron felt that American agriculture needed diversification and that plant exchanges would help.

Some time in 1868 or 1869, Capron called Saunders' attention to a letter he had received from Brazil regarding the merits of a seedless orange. After one unsuccessful attempt to obtain live

cuttings, a second shipment that was successful arrived in 1871. Two years later, Saunders sent two of the trees to Mrs. Eliza Tibbets of Riverside, Calif. This was the beginning of the California navel orange industry.³

In 1868, Capron enlarged the scope of the Department's scientific research by establishing a Division of Botany to care for the herbarium material which had been collected by various Government expeditions and had been in the custody of the Smithsonian Institution (212). The following year, Charles Christopher Parry was appointed the first botanist of the Department, with the primary duty of caring for these collections.

John Gamgee of the Albert Veterinary College, London, joined the staff of the Department in 1868. Gamgee had investigated Texas fever of cattle in Illinois, and he was now assigned to do additional work on the disease. Congress appropriated \$15,000 for investigations of cattle disease the following year. Results of the investigations were published in 1871 (303).

Early in 1871, the Japanese Government asked Capron to head a mission to investigate the agricultural possibilities of Hokkaido. Capron accepted, and resigned from the Department effective July 31, 1871.⁴

Scientific Change Under Watts

President Grant named Frederick Watts of Pennsylvania Capron's successor, and he entered office on August 1, 1871. Then 70 years old, Watts had been a prominent lawyer and railroad director, and was widely known for his dedication to improved agriculture. He had introduced Mediterranean wheat into Pennsylvania in 1839, and the first trial of the McCormick reaper in the State took place on Watts' farm in 1840. He was a moving spirit in the organization of the Pennsylvania State Agricultural Society in 1851, and was active in organizing the United States Agricultural Society. He was called "the father" of the Pennsylvania Farmers' High School, which later became the Pennsylvania State University. The historian of Pennsylvania agriculture has said regarding Watts: "From 1850 until 1880 he was by far the most outstanding figure in Pennsylvania agriculture" (81, p. 482).

During his 6-year term as Commissioner, Watts emphasized the practical application of science to agriculture. This emphasis led to conflicts with certain scientists, notably C. C. Parry, who resigned in 1871. Parry was succeeded as botanist by George Vasey in 1872. Watts' emphasis on applied science in agriculture led to dropping certain lines of work and beginning others. In 1872, Watts suspended publication of meteorological data; he suggested that the work be turned over to the Signal Service of the Army, and Congress adopted the recommendation.

Systematic study of diseases of plants began in 1871, when Thomas Taylor was appointed to head the newly created Division of Microscopy. Taylor had been trained in science in his native Scotland and in medicine at Georgetown University. He was enthusiastic about the potential value of the microscope in agricultural research, and his division was given the responsibility for all work with microscopes in the Department. Taylor made some outstanding contributions on plant disease. The Division of Microscopy was abolished July 1, 1895, after which other divisions were permitted to use microscopes.

Work that eventually became one of the streams making up the Forest Service began during Watts' administration. Watts encouraged the botanist, George Vasey, to collect sections and botanical specimens of forest trees. A notable exhibition of this material was made at the Centennial Exposition in 1876. A catalog of forest trees and extensive statistical material on forestry was published in the annual report for 1875.

Meanwhile, in 1873, Franklin B. Hough presented a paper before the American Association for the Advancement of Science which led the association to pass a resolution memorializing Congress on the need for cultivating timber and preserving forests. In the appropriation act for 1877, approved August 15, 1876, Congress directed the Commissioner of Agriculture to appoint someone to make a statistical report on forests and forestry. Hough was appointed, and during the next few years he made extensive reports. From then on, the Department has always had staff personnel working on forestry problems (76, pp. 5-7).

As the father of Pennsylvania's agricultural college, Commissioner Watts was interested in promoting closer relations between the Department and the colleges. He called a conference of representatives of the colleges and State boards and societies to meet at the Department on February 15, 1872. The conference helped to promote the movement to establish State experiment stations and the passage of the Hatch Act of 1887 (230, p. 52).

Le Duc and National Self-Sufficiency

Watts was succeeded by William Gates Le Duc, who took the oath of office as Commissioner on July 1, 1877. Le Duc was born and raised in Ohio, and was a graduate of Kenyon College. After graduation from Kenyon, Le Duc settled in Minnesota. He volunteered for service in the Civil War, and was discharged with the brevet rank of brigadier general. After several unsuccessful business ventures, Le Duc turned to farming (184).

Almost as soon as he took office, Le Duc attempted to make two major reforms by limiting seed distribution to "new and valuable

seeds," and by insisting that only qualified personnel be appointed to jobs in the Department. While he drew attention to the abuses in both areas, he did not succeed in bringing about major changes. Le Duc also urged the establishment of an experimental farm near Washington, with 8 to 10 stations in various parts of the country. This proposal was adopted many years later.

Much progress was made on studies of insect pests under the leadership of Charles V. Riley, who served as entomologist in the Department from 1878 to 1879, and from 1881 to 1894. Between his two terms in the Department, Riley served as head of the United States Entomological Commission, which he was instrumental in getting Congress to establish in 1877. The Commission's major purpose was to study grasshoppers, which had ravaged wide areas in the West.

Animal diseases were also taking their toll. Their importance was brought forcefully to American attention when first England and then other European nations began to limit the importation of live animals and fresh meat from the United States on the basis of disease prevention. Commissioner Le Duc strongly urged the establishment of a Division of Veterinary Science to deal with such problems. Congress made special appropriations of \$10,000 in 1878 and 1880 for work on animal diseases.

One of Le Duc's major aims was to make the United States as self-sufficient as possible. He seized upon sugar and tea as two agricultural products, largely imported, that should be produced in the United States. The sugar work was in charge of Peter Collier, who served as the Department's chemist from 1878 to 1883. The first efforts were concentrated on improving the yield of sugar from cane and on obtaining sugar from beets, corn, and other products. The beet sugar industry was established on a permanent basis during this period, but its future possibilities were underestimated by the Department.

In 1878, Commissioner Le Duc attended a fair at Minneapolis where he saw a bottle of sorghum sirup and a bucket of sorghum sugar. Le Duc was so impressed with the sugar that he sent a representative of the Department to investigate. He found that the grower had developed a new variety of sorghum which he called Early Amber. Thereafter, as long as he was in office, Le Duc devoted a considerable part of the Department's resources to research on sorghum sugar under Collier's direction.⁵ Congress passed special appropriations for the research. Work was continued under George B. Loring, Le Duc's successor, and Harvey W. Wiley, Collier's successor, but all their efforts were unsuccessful in establishing a sorghum sugar industry.

A number of Commissioners of Patents and of Agriculture had been interested in developing the tea industry in the United States. Le Duc gave the work increased emphasis primarily because it would make the United States more self-sufficient, and also because it would provide more profitable and more diversified

agriculture in the South. Furthermore, the employment of labor in picking tea leaves would ease the the unemployment situation. The Department distributed large numbers of tea plants, and in 1880 and 1881 Congress made special appropriations for experimental work with tea. The funds were used to establish an experimental tea farm at Summerville, S.C. Commissioner Loring reduced the work with tea, but it was revived from time to time up to World War I. The major effect was to induce a number of families to grow their own tea (127).

Loring as Commissioner

Although some farm editors and agricultural groups urged President Garfield to retain Le Duc as Commissioner, he was succeeded on July 1, 1881, by George Bailey Loring of Massachusetts. The new Commissioner had received a medical degree from Harvard College, had been prominent in State politics, and had served as a Representative in Congress from 1877 to 1881. Loring was interested in promoting scientific and practical agriculture. He had made his farm experimental in nature, and had been a leader in agricultural societies and on the State board of agriculture. He promoted the establishment of the Massachusetts Agricultural College and lectured there on livestock farming.

During Loring's tour of service as Commissioner, interest in the application of science to farming was growing, and he succeeded in getting departmental appropriations virtually doubled during his 4-year term. In addition to continuing work on sorghum and beet sugar and on tea growing, he developed new lines. Pure-food research began when the Division of Chemistry started to examine butter in 1883.

The Division of Entomology, again under the leadership of C. V. Riley, began publishing a series of bulletins reporting on research on various insect pests. The Division received a special appropriation of \$15,000 in 1882 for promoting silk culture.

The Commissioner established a Division of Forestry, headed by Franklin B. Hough, in 1881. Two years later, Hough was succeeded as head of the Division by Nathaniel Hillyer Egleston.

The Bureau of Animal Industry

The work on animal disease continued, and it received even greater emphasis as time went on. In 1883, the Commissioner established a Veterinary Division, headed by Daniel Elmer Salmon,

who had been trained at Cornell University and in Paris, and had entered the departmental service in 1879. Congress recognized the need for a vigorous research program in animal diseases, enforcement of the act regulating the transportation of animals passed March 3, 1873, and professional aid for the Treasury Department in enforcing regulations regarding the importation of livestock. A bill establishing a Bureau of Animal Industry was introduced late in 1883, and was approved May 29, 1884.⁶ Salmon became the first Chief of the new bureau.

Creation of the Bureau of Animal Industry was a major landmark in the history of the Department—it not only marked the establishment of the first bureau in the new Department but its regulatory powers initiated a new departure in Government control.

Colman Is Last Commissioner

The last Commissioner of Agriculture, Norman Jay Colman of Missouri, succeeded Loring on April 3, 1885. Schoolteacher, lawyer, and politician, Colman was perhaps best known for his periodical, *Colman's Rural World*. He was president of the Missouri Press Association; founder and president of the Missouri Horticultural Society; and president of the Missouri Livestock Breeders Association, Missouri State Fair, and Missouri State Board of Agriculture.

Under Colman's leadership, most previous programs were continued, although the tea farm was dropped. Silk culture was promoted by the Division of Entomology, and the study of grasses was continued by the Division of Botany. A Section of Mycology was established in the Division of Botany in 1886. Scientific work was emphasized by the Division of Forestry under the leadership of Bernhard E. Fernow, Chief from 1886 to 1898.

The Bureau of Animal Industry studied several animal diseases. It attempted to halt the westward spread of pleuropneumonia in cattle, but found it could not accomplish this by either treatment or quarantine. More drastic measures were necessary, and, on March 3, 1887, Congress gave the Bureau authority to purchase both diseased and exposed animals. By 1892, pleuropneumonia was eradicated.

Two new divisions were established early in Colman's term as Commissioner. The first, a Division of Pomology, was established July 1, 1886, with Henry E. Van Deman in charge. The Division immediately undertook the collection of different kinds of fruit, and published illustrated accounts of new varieties.

The Division of Ornithology and Mammalogy was also established July 1, 1886, under the leadership of Clinton Hart Merriam.

The Division was to investigate the food habits, distribution, and migration of North American birds and mammals in their relation to agriculture. Its first project was a special study of the English sparrow and the rice bird or bobolink, both of which were causing heavy losses to crops in certain areas.

In addition to the two divisions, a Section of Vegetable Pathology was established on the same date under the direction of Frank Lamson-Scribner. He was succeeded in 1888 by Beverly T. Galloway, who was to become one of the best known scientists of the Department. The Section's first investigations were of fungus infections of grapevines and of the peach yellows disease.

Hatch Experiment Station Act

Two laws passed during Colman's administration, with his strong support, were of major importance to American agriculture. The first was the Hatch Act, giving Federal aid for State experiment stations, and the second was the act elevating the Department to Cabinet status, discussed in the next chapter (133, pp. 84-101).

The establishment of the State colleges of agriculture had marked a notable step in the advancement of American agriculture. Nevertheless, agricultural courses of a college level had to await the development of experiment stations which would provide basic knowledge upon which courses could be built. In 1845, John Pitkin Norton outlined an idea for a nationwide system of agricultural experiment stations. Thirty years later, one of Norton's students, Samuel William Johnson, was instrumental in the establishment of the Connecticut Agricultural Experiment Station, the first State-supported agricultural experiment station in the United States. One of Johnson's students, William O. Atwater, later a leader in the experiment station movement, worked with Johnson in the establishment and direction of this station. Several other States established stations during the next decade.

Meanwhile, an organized movement to secure aid for stations got underway in 1871 and continued for the next several years. In 1882, the first bills to grant Federal aid were introduced into Congress. In order to bring support to bear, Commissioner Colman called a convention of colleges and experiment stations which met in Washington on July 8-9, 1885. Colman stressed the idea of cooperation between colleges and the Department, and urged legislation for federally supported experiment stations. From then on, Colman and many State leaders kept the need of such legislation before Congress. In 1886, a bill along such lines was introduced into the House of Representatives by William H. Hatch of Missouri. The bill was passed by Congress and approved by

President Cleveland on March 2, 1887.⁷ Late in the year, a convention was held at the Department at which the Association of American Agricultural Colleges and Experiment Stations was formed.

On October 1, 1888, Colman established the Office of Experiment Stations within the Department, in accordance with the new law, to act as a center for the exchange of information on research projects and the results of research. The first Director was W. O. Atwater.

Two aspects of the new law proposed by Representative Hatch deserve mention. From the viewpoint of National-State cooperation, an authority has stated that the act "expanded the land-grant principle into a policy of national financial grants to the States destined subsequently to be applied to many other functions of government" (86, *p. 11*). A leading historian has aptly said, from another viewpoint, "The stations brought system and gave direction to the land-grant colleges, and more than any other factor assured their continuation" (188, *pp. 141-142*).

The establishment of the stations and their cooperation with the Department, the beginning of basic research in the sciences within the Department, the regulatory powers granted the Department, and the assignment of new functions to the agency indicated that the Department was proving itself useful to the farmer and to the public. This was recognized when Congress elevated the Department to Cabinet status.

¹ 12 Stat. 387.

² Newton, A. A., Isaac Newton, First Commissioner of Agriculture, typewritten manuscript (in USDA Library).

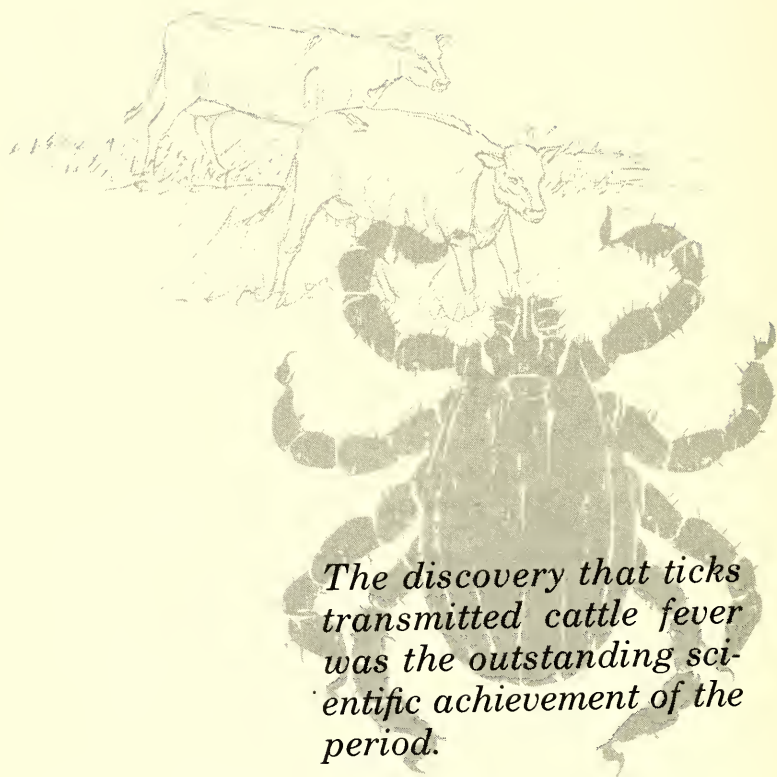
³ Saunders, William, Journal, handwritten manuscript copy, 1898-99 (in USDA Library), pp. 1-2; Correspondence in State Department Archives, National Archives, Richard A. Edes to Horace Capron, Apr. 20, 1871, and Frederick Watts to Edes, Aug. 3, 1871.

⁴ Capron, Horace, Memoirs of Horace Capron, typewritten manuscript, 2 vols. (in USDA Library).

⁵ Le Duc, W. G., Recollections of a Quartermaster, typewritten manuscript copy, 1890 (in USDA Library).

⁶ 23 Stat. 31.

⁷ 24 Stat. 440.



The discovery that ticks transmitted cattle fever was the outstanding scientific achievement of the period.

“That the Department of Agriculture Shall Be an Executive Department”

When the Department of Agriculture was established in 1862 under the direction of a Commissioner, two opposing viewpoints were much in evidence. One group insisted that the Department should be established as an executive department with Cabinet status; the other that agriculture should be represented by a bureau in another department. The opponents of a separate department feared that it would eventually become an executive department. Their fears of such an outcome were well founded, even though their basic viewpoint was erroneous.

Legislation To Raise the Department to Cabinet Status

Agricultural spokesmen in Congress were inactive for the first few years after the Department was established. However, on February 24, 1874, James Wilson of Iowa, later to serve 16 years as a distinguished Secretary of Agriculture, introduced a bill into the House of Representatives to give the Department Cabinet status (271, *Feb. 24, 1874*). The bill died in the Committee on Agriculture.

Wilson's bill was indicative of a widespread feeling, encouraged by the economic depression of the period, that the farmer's representative should have a greater place in governmental councils. First the Granges and then the Farmers Alliances and other lesser groups got behind the movement. In 1876, the National Grange endorsed the idea at its annual meeting. Thereafter, the various farmer organizations kept a steady flow of petitions and memorials on the subject before the Congress (39, *pp. 117-118*).

Meanwhile, on January 10, 1876, Congressman Augustus Cutler of New Jersey introduced his first bill to raise the Department to Cabinet status. His second was introduced on October 29, 1877. On February 6, 1878, Congressman Henry L. Muldrow introduced a similar bill, and followed with another on April 21, 1879. Thereafter Muldrow gave wholehearted support to the movement. Another Congressman, D. Wyatt Aiken of South Carolina, a prominent member of the National Grange, also took forceful action on behalf of the Department.

On March 4, 1880, Aiken, who was on the Committee on Agriculture, reported a substitute bill for Muldrow's bill of April 21, 1879. The Aiken bill was debated on February 7, 1881. In this debate and in subsequent remarks on February 18, 1881, opposing views regarding the elevation of the Department were clearly expressed. Congressman J. T. Updegraff of Ohio urged that agriculture, as the bedrock of the Nation's power and wealth, should be recognized. It needed aid in interpreting physical and economic laws, but would "speedily return all this outlay, however magnificent" (271, *Feb. 7, 1881*).

A member of the Committee on Agriculture, who was to become one of the foremost spokesmen for agriculture in the House of Representatives, W. H. Hatch of Missouri, urged that the Cabinet post be created under the "general welfare" clause of the Constitution. He stated that every other interest except agriculture had an organized system in the Government to look after its welfare. The fact that agriculture was large and diverse was "the very reason why it should have a representative in the Cabinet" (271, *Feb. 7, 1881*).

The chairman of the Committee on Agriculture, J. W. Covert of New York, led the attack on the bill. Covert said that the secretaryship would become "a mere political position to be offered or awarded to somebody for political services." He opposed not only this bill, but the Department as such. As he said:

The controlling idea involved in the creation of the department is that our wide domain should be tested, to ascertain what can be most successfully produced in its various sections. Experiments in this direction cannot be profitably conducted forever. Sooner or later the work of the department should be closed, and meanwhile I cannot see why the farmer should not, like other men engaged in other pursuits, learn to experiment for himself and act for himself without reference to governmental aid (271, *Feb. 7, 18, 1881*).

A ballot was taken on a motion to pass the bill under suspension of the rules, but failed by one vote to obtain the necessary two-thirds majority. During the next few years, many bills were introduced to make the Department of Agriculture an executive department, and many petitions in favor of the proposal were noted in the *Congressional Record*. The House of Representatives passed bills for the purpose on May 10, 1882, and December 15, 1884, but the Senate did not vote on these bills.

A different approach was taken on February 3, 1886, when the Committee on Agriculture reported a bill to establish a Department of Agriculture and Labor. A Division of Labor, under a Commissioner of Labor, was to be established. This bill was debated and was passed in amended form on January 11, 1887. The Senate passed the bill with further amendments on February 23, 1887. It went to conference, but was not acted upon before the end of the session (271, Oct. 8, 1888).

The proposal to combine farm and labor interests in one department aroused much opposition from farm spokesmen. The Commissioner of Agriculture, Norman J. Colman, opposed changing the status of the Department if labor was to become part of the new agency (133, pp. 101-103; 54). These objections were met when Congressman Hatch reported a bill for the Committee on Agriculture on March 7, 1888, which gave the Department Cabinet rank but omitted all mention of labor. The most controversial section of the bill called for the transfer of "the Weather Service of the United States Signal Service Bureau" to the Department. This provision had been added to the 1887 version by the Senate, and was now included in the House bill. The bill passed the House after debate of the proposed transfer.

The bill passed by the House was brought up in the Senate on September 4, 1888, and was debated for the next 5 days. The leading advocates of the bill were Senators Preston B. Plumb of Kansas and James Z. George of Mississippi, although Senator George opposed the transfer of the Weather Service. Much of the debate centered around the proposed transfer. Senator O. H. Platt of Connecticut, however, urged that any new department should take account of all the business and labor interests of the country. He stated that the bill would benefit only farmowners, leaving the wage earners in agriculture without recognition. Senator William E. Chandler of New Hampshire argued that the establishment of a Cabinet post representing agriculture would be a major departure in Government, since all of the present Cabinet posts were political in that they were connected with and essential to the political government of the country. On the other hand, fostering agriculture was in no sense essential to the government of the country. Senator Plumb refused to admit such distinctions and suggested that additional departments might well be created when they were needed.

The Senate voted on September 21, 1888, to drop the proposal for the transfer of the Weather Service, and to establish the Department of Agriculture as an executive department (271, Sept. 14, 17, 18, 19, 20, 21, 1888).

When the bill was returned to the House, Representative Hatch felt that the Senate had removed its original clause transferring the Weather Service only as a delaying tactic (271, Oct. 8, 1888). He submitted a conference report to the House on February 1, 1889, asking the House to concur in the Senate changes. Both Houses ac-

cepted the report and the bill was signed by President Cleveland on February 9, 1889.

Although the new law had gone through many forms prior to its enactment, its final wording made no changes in the Department except to make it an executive department headed by a Secretary of Agriculture. The law also provided for an Assistant Secretary to be appointed by the President.¹

The First Secretary of Agriculture

President Cleveland appointed Norman J. Colman, who had served since April 3, 1885, as Commissioner of Agriculture, to the new post. Colman took his oath of office on February 15, 1889. While he had little opportunity to influence the Department's future in the 3 weeks that he served as Secretary, he left office satisfied that the passage of the Hatch Experiment Station Act and the act elevating the Department to Cabinet status could have a long-reaching effect on American agriculture.

The Development of the Department Under Rusk

The new Secretary of Agriculture, Jeremiah McLain Rusk, took office on March 6, 1889. Rusk farmed near Viroqua, Wis., served with distinction in the Civil War, was very active in State politics, and had been elected Governor of Wisconsin for three successive terms just prior to his appointment as Secretary. He decided to divide the work into two major divisions: executive, under the immediate direction of the Secretary; and scientific, under the direction of the Assistant Secretary.

The President appointed Edwin Willits of Michigan to the new office of Assistant Secretary. Willits had served in the House of Representatives for three terms, and had been president of Michigan Agricultural College since 1885. This marked the first time that a leading figure from a land-grant college had accepted a top post in the Department. Rusk had aided the development of agriculture at the University of Wisconsin while he was Governor, so, as might be expected, both he and Willits worked to promote good relations between the Department and the State agricultural colleges and experiment stations. The establishment of the *Experiment Station Record* in 1889 by the Office of Experiment Stations was a step in this direction.

The Secretary was convinced of the necessity for reaching more farmers with the results of the Department's work. In 1889, the Office of Experiment Stations pointed the way when it issued two bulletins in a popular format as Farmers Bulletins. This series was taken over by the Department. It has remained one of the keys to wide dissemination of the results of departmental research.

In 1889, the Secretary established the Section of Records and Editing under the direction of George William Hill in the Division of Statistics and reorganized it as a division in 1890. A Division of Illustrations was organized in 1890. The two divisions were combined by Secretary Morton as a Division of Publications in 1895.

An additional step to make research results more readily available became possible during Secretary Morton's administration when Congress, on January 12, 1895, passed a law providing for the annual publication of a volume of papers to "be specially suited to interest and instruct the farmers of the country" as distinct from the business reports of the Department.² The first of the new series was the Yearbook of the United States Department of Agriculture for 1894. Later, the annual volume was called simply the Yearbook of Agriculture.

The first step to establish personnel policies as such and to maintain adequate personnel records was taken by Secretary Rusk in 1891, when he asked the Civil Service Commission for authority to name an Appointment Clerk in the Department. The Commission approved, and Joseph B. Bennett was appointed to the new position on March 10, 1891. This marked the first separate establishment of personnel work in the Department. At the suggestion of President Harrison, an efficiency rating system was installed, where each employee was rated by his supervisor on a number of factors. The system led to much laborious recordkeeping (322, pp. 39-44).

Secretary Rusk was familiar with agricultural problems, and he recognized the need for certain types of activities that were to become action programs in future years. In 1889, Congress specifically appropriated funds for the continuation and extension of investigations of foods, drugs, and liquor.³ Rusk commented in his annual report of 1891 that a system of inspection for all articles of food was extremely desirable. The next year, he advocated a reduction in cotton acreage.

Like most persons with a rural background, Secretary Rusk was interested in the weather, and believed that accurate forecasts, promptly relayed, would be of great help to the farmers. In 1892, according to one of the farm papers, Secretary Rusk suggested that weather forecasts be announced by using steam whistles. One long blast would signal that the forecast was fair weather; two long blasts, rain or snow; three long blasts, local rains; one short blast, lower temperatures; two short blasts, higher temperatures; and three short blasts, a cold wave (1). In any case, the Congress

had directed the establishment of a Weather Bureau in the Department by an act approved October 1, 1890, and the transfer of the weather service of the Signal Corps of the Army to the new Bureau on July 1, 1891.⁴ The Weather Bureau did not confine its research to forecasting. In 1892, it initiated the Department's work on soils by publishing a *Report on the Relation of Soil to Climate* and a bulletin on *Some Physical Properties of Soils in Their Relation to Moisture and Crop Distribution*. A Division of Agricultural Soils was established in the Bureau in 1894.

Several notable advances were made in scientific work, although the widespread interest in silk culture that was marked by giving the Silk Section independent status in 1889 indicated that it would be necessary to temper science with economics.

Conquest of Cattle Fever

The outstanding scientific accomplishment of the period, and one that has been of inestimable value to human life, was the discovery that Texas fever or cattle fever was carried by ticks. The disease, known since colonial days, particularly affected northern cattle when they came into contact with southern cattle. After the Civil War, when Texan cattlemen began to drive their stock to northern markets, a trail of fever would be left along the way. Theobald Smith of the Bureau of Animal Industry, with the aid of F. L. Kilbourne and Cooper Curtice, began work on the problem in 1888, and in 1890 definitely established that the fever was spread from animal to animal by the cattle tick. This discovery provided the basic knowledge necessary to control the disease. More important, this was the first demonstration that a disease-producing organism could be transmitted by a carrier from one animal to another. The application of this theory to the dread disease, yellow fever, led to the identification of a particular type of mosquito as its vector and to its subsequent control. Many other insect-borne diseases have been identified and brought under control. This is an outstanding example of how research directed toward a specific objective may through wide application be of immeasurable benefit to humanity (180, pp. 146-151).

The Bureau of Animal Industry had been created in 1884 to deal with communicable diseases and other livestock problems. The discovery of the cause of cattle fever was not its only accomplishment. Through the purchase and destruction of diseased animals, contagious pleuropneumonia was completely eradicated by 1892.

Despite the marked improvement in the livestock situation when the Bureau of Animal Industry began its work to control disease, many European nations still continued to restrict the importation of American meat. A select committee of the Senate was appointed

in 1888 to investigate the transportation and sale of meat products. The committee recommended that an inspection system be established (176, pp. 10-16). Congress responded by passing the Meat Inspection Act of August 30, 1890, which authorized the inspection of salted pork and bacon and live animals intended for exportation. It also authorized the quarantine of imported animals. However, European objections were not met in that live animals were not inspected before slaughter. A supplementary act of March 3, 1891, made mandatory the inspection of cattle intended for export; live cattle the meat of which was intended for export; and cattle, sheep, and hogs about to be slaughtered and their products sold in interstate commerce. The law also authorized inspection after slaughter.⁵

These laws marked the beginning of meat inspection in this country, an activity which has been of outstanding importance to American consumers. The Secretary established the Division of Inspection within the Bureau of Animal Industry, effective April 1, 1891, to carry out this work. The enforcement of quarantine regulations was assigned to the newly created Division of Quarantine at the same time.

Morton Becomes Third Secretary

The third Secretary of Agriculture, Julius Sterling Morton of Nebraska, took office on March 7, 1893, and served until March 5, 1897. The first Assistant Secretary, Edwin Willits, continued in his post through 1893 so that he could complete his work as chairman of the Government Board for the Columbian Exposition at Chicago. He was succeeded on January 1, 1894, by Charles W. Dabney. Dabney was a chemist who had been director of the State experiment station and then president of the University of Tennessee. His ability and attractive personality enabled him to do much to maintain and even expand scientific work, even though Secretary Morton's philosophy was to limit all departmental activities.

The new Secretary was born in New York, spent most of his youth in Michigan, and migrated to Nebraska shortly after the passage of the controversial Kansas-Nebraska Act of 1854. Morton's career was devoted to politics, in which his consistently conservative attitude won the favor of many voters. Morton was also an editor and farmer. As an editor, he promoted agricultural advancement. His support of tree planting on the plains led to the establishment of Arbor Day, a special day for that purpose, first observed in Nebraska on April 10, 1872 (166, pp. 151-166).

When Morton became Secretary of Agriculture in 1893, the economic condition of agriculture and the Nation made it easy for

the Secretary to follow his conservative convictions. Agriculture was in a difficult economic situation, while the general economy was heading into the Panic of 1893 and a subsequent depression especially adverse to farmers. Some of the public was demanding a decrease in Government expenditures and a reduction in taxes. These demands coincided with the views of President Cleveland and Secretary Morton, so every effort was made to cut expenditures within the Department.

The conflicting effect of the efforts to cut departmental activities and expenditures can be seen in figures showing that the Department had 1,577 employees on July 1, 1891, and 2,043 employees on July 1, 1895. A total of \$2,303,655.75, of which \$2,253,262.29 was spent, was appropriated for fiscal year 1892. A total of \$2,506,915.00, of which \$2,021,030.38 was spent, was appropriated for fiscal year 1895 (*305, p. 1083; 271, Mar. 12, 1912*). In addition to dismissing many clerks, the Secretary ordered reductions in the salaries of others. One blanket reduction, cited with approval by the then Disbursing Officer, was in the salaries of women employees. With five exceptions, four in the disbursing office and one in the Bureau of Animal Industry, the salaries of all women receiving over \$1,200 a year were reduced to that amount or less.⁶

When the Secretary took office, he found that regulations of the Civil Service Commission restricted his authority to hire and fire employees. He was very critical of the "classified service" and the Commission in his first annual report. However, Morton came gradually to realize that the most promising means of attaining greater efficiency in the public service in the Department was the further extension of the classified service. On June 10, 1896, a sweeping order of the President placed all employees of the Department except the private secretary to the Secretary and manual laborers under civil service rules (*322, pp. 52-55*).

Secretary Morton made a determined effort to discontinue the congressional distribution of seeds, a costly measure which did little or nothing to aid or improve agriculture. In his first annual report, the Secretary urged that the practice be discontinued, and the next year he recommended that Congress make no appropriation for the purpose. When the appropriation was nevertheless made, the Secretary refused to purchase any of the seeds offered on the basis that they were not "rare and uncommon to the country, or such as can be made more profitable by frequent changes from one part of our own country to another." Congress was displeased at this effort of a Cabinet officer to set aside a law, and passed a joint resolution, without the President's approval, directing the Secretary to carry into effect the provisions of the appropriation act.⁷ Secretary Morton made no further effort to thwart Congress in this matter, although he continued to be highly critical of the distribution.

Although he was forced to continue seed distribution, Secretary Morton sought in every other way possible to cut expenditures.

He vigorously supervised the experiment stations. On one occasion, for example, he wrote a director of a station, taking him severely to task for excessive expenditures for feeding his horses. In an effort to reduce telephone costs, the Secretary installed a private system within the Department, with only one instrument connected to the city system. Most of the instruments of the Department's own system were installed in hallways, where even chiefs of divisions went to answer calls (322, p. 69).

While the Secretary was dedicated to cutting expenditures, he recognized the value of much of the scientific experimentation underway in the Department. Much valuable work was done by the various agencies, although few entirely new projects were undertaken.

Investigations into road management and roadmaking began in 1893, when Congress appropriated \$10,000 for such purposes.⁸ The Federal Government built many roads before the Civil War, but with the exception of military roads in the West all governmental activity in roadwork ceased with the end of the war. However, during the 1880's members of the good-roads movement became active in urging national aid. The need for improved country roads to enable farmers to get their crops to market increased as producers became more dependent upon selling produce. Interested groups, including delegates representing agriculture, organized the National League for Good Roads in 1892, and urged national aid upon Congress. The result was an appropriation to the Department, and the establishment of the Office of Road Inquiry by Secretary Morton on October 3, 1893. The work of the Office increased from this very modest beginning until it became the Bureau of Public Roads, with responsibility for Federal-State co-operation in roadbuilding (108, pp. 2-33).

The Department had been interested for many years in securing new European markets for American farm products. Secretary Rusk had obtained a small appropriation for such work, and had maintained a special agent of the Department in Europe. Secretary Morton felt that "There is nothing of greater or more vital importance to the farmers of the United States than the widening of the demand for their products." At the same time, foreign restrictions were hampering expansion just as the depression of 1893 made wider markets more necessary. The Secretary organized a Section of Foreign Markets on March 20, 1894, "for the purpose of collecting and disseminating information calculated to assist in securing a more extended market abroad for the agricultural products of the United States." This marked the formal beginning of an activity that has seen constantly increasing development with the passing years.

In his first annual report, Secretary Morton remarked that—

Since the present Librarian, Mr. W. P. Cutter . . . took charge of the library . . . modern methods have been introduced . . . A dictionary catalogue has been instituted and the books have been

arranged in a regular system A reading room has been arranged and increased facilities provided for the convenience of investigators. The library has been made in this manner a working laboratory instead of a miscellaneous storehouse.

Cutter also proposed the reorganization into a system of bureau libraries with strong ties connecting them to a central main unit. This system gradually took form, and in the early years of the 1900's the Library assumed the pattern that was followed with little change until 1942.

Also in his first annual report, Secretary Morton stated that the appropriations for the support of experiment stations "were the only moneys taken out of the National Treasury by act of Congress for which no accounting to Federal authorities was required." Congress thereupon, in the appropriation act for fiscal year 1895, gave the Secretary of Agriculture authority to require reports on expenditures from the stations and to ascertain whether or not expenditures were made in accordance with law.⁹ This supervisory authority considerably expanded the work of the Office of Experiment Stations.

Beginnings of Nutrition Work

Congress followed another of Secretary Morton's suggestions and appropriated \$10,000 for nutrition studies for the 1895 fiscal year. This project, which was to become one of great significance in the years ahead, was carried on in cooperation with the State colleges, experiment stations, and other organizations.¹⁰ The Office of Experiment Stations placed W. O. Atwater in charge of the project, with headquarters at Wesleyan University, Middletown, Connecticut. Atwater had resigned as Director of the Office of Experiment Stations in 1891.

A Dairy Division was created in the Bureau of Animal Industry on July 1, 1895, under authority of an appropriation act.¹¹ The work of the new Division was confined to collecting and disseminating information relative to dairying in the United States and throughout the world.

Among other organizational changes reflecting new emphasis in the American agricultural scene, a new Division of Agrostology was established July 1, 1895. Directed by Frank Lamson-Scribner, it conducted research on grasses and forage plants, particularly in the West. The Division of Microscopy was abolished on July 1, 1895. The use of microscopes by this time had spread to many lines of work; it was no longer possible or desirable to have all of it under one special division.

While the aims of Secretary Morton and his predecessor, Jeremiah M. Rusk, seemed to be somewhat different, both administra-

tions were leading toward one goal—expansion of production research. The Department had been raised to Cabinet status under the leadership of Norman J. Colman and had seen a good deal of expansion under Secretary Rusk. Secretary Morton brought a closer control of expenditures and a vigorous examination of research and regulatory activities. His purpose in this was to determine whether these activities were in the interest of the farmer and the public, and drastically to reduce them—according to some of his political foes, to eliminate the Department entirely. But what he discovered was that events both within and outside farming were emphasizing the demand for more, rather than less, research and regulation.

The Panic of 1893 and the depression in farm prices that followed made it imperative for farmers to cut costs and to increase efficiency if they were to stay in business. The growth of the Populist Party was a threat to older parties and to established business interests; according to conservative views, the Populist wave must be diverted by one means or another. The best farmland open to settlers was gone—the Census Bureau had reported in 1890 that the frontier line as such had ceased to exist. Farmland still open for settlement required capital to make it productive, and markets were needed for what it produced. City dwellers no longer grew their own food, and many were demanding protection from unscrupulous dealers who were selling adulterated, contaminated, or decayed food products.

The answer, or at least one answer, to many of these problems was to make the farmer a more efficient producer. Efficient production would cut unit costs and thus, theoretically at least, increase profits. At the same time, more good food would be available at reasonable prices to city dwellers. Farmers would become more efficient as the result of research by the Department, State colleges, and State experiment stations. The Department was about to take the lead in the most effective emphasis upon farm production research the world had ever seen.

¹ 25 Stat. 659.

² 28 Stat. 612.

³ 25 Stat. 835.

⁴ 26 Stat. 653.

⁵ 26 Stat. 414; 26 Stat. 1089.

⁶ Evans, F. L., *Reminiscences Covering Personal Characteristics of Several Executive Heads of the United States Department of Agriculture, 1871 to 1906*, typewritten manuscript (in USDA Library), pp. 8–9.

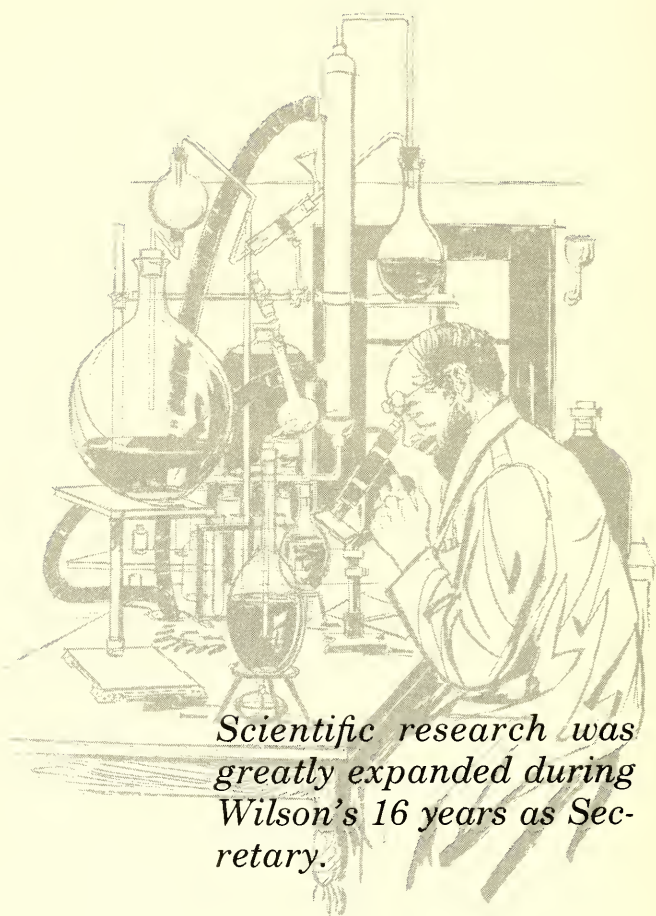
⁷ 29 Stat. 467.

⁸ 27 Stat. 734.

⁹ 28 Stat. 271.

¹⁰ 28 Stat. 271.

¹¹ 28 Stat. 727.



Scientific research was greatly expanded during Wilson's 16 years as Secretary.

Science Comes to Farming

When James Wilson became Secretary of Agriculture on March 6, 1897, a new era began for the Department, one characterized by expansion, the widening of the scope of its activities, and the strengthening of the relationship between the Department and the land-grant colleges. Wilson's 16-year tenure of office, ending on March 5, 1913—the longest for any Cabinet officer—spanned the administrations of Presidents McKinley, Theodore Roosevelt, and Taft.

The period was one of steadily rising prices for the farmers, though with greater increases in some years than in others. Even in 1907, the year of bankers' panic and a fall in the stock market, the level of prices for agricultural commodities remained steady. Nevertheless, there remained an undercurrent of dissatisfaction with prices and with aspects of distribution. In part, this found expression in the formation of new agrarian organizations and attempts at cooperative marketing and purchasing by farmers. Foremost among the organizations were two groups—the American Society of Equity and the Farmers' Educational and Cooperative Union of America. The latter was known popularly as the Farmers Union. Both were organized in 1902. During the late 1890's and the first decade of the 20th century, farmers' organizations had little direct relationship with the Federal Department of Agriculture.

The appointment of the United States Industrial Commission in 1898 to collect information and recommend legislation to meet the problems of agriculture, labor, and capital was evidence of external concern for agrarian interests.¹ Congress was aware of discontent among farmers, who were unable to cope with conditions brought about by expanding industry and were seeking aid from the Federal Government (289).

The Commission made exhaustive studies, publishing its 19-volume report from 1900 to 1902. Testimony and reports on distribution of farm products, agriculture and agricultural labor, and

agriculture and taxation were published as three of these volumes. The one on marketing has been called "the best book on agricultural marketing available to students of agricultural economics at the beginning of the twentieth century." It "set the pattern for many studies of the subject by agricultural experiment stations during the next two decades" (220, pp. 517, 518). The final volume, a summary of the other 18, included recommendations for legislation and action. Those relating to agriculture included: Inspection and grading of agricultural commodities and livestock; inspection of nursery stock; establishment of a pure food section within the Division of Chemistry to prevent adulteration, misbranding, and deceptive imitations of foods, beverages, drugs, candies, etc.; control of animal diseases; increased appropriations for sample roads; extension of the rural free delivery; and the consolidation of the forestry work (341, vols. 6, 10, 11, 14, 19). In general, these recommendations were later incorporated into legislation.

"Tama Jim" Wilson, as he was popularly known, had been a professor of agriculture and director of the experiment station at Iowa Agricultural College. He had served three terms in both the Iowa State Legislature and the United States House of Representatives. While in the Federal Congress, Wilson had introduced, on February 24, 1874, the first bill to raise the Department to Cabinet status. In a period characterized by a mushrooming expansion of activities, the passage of enabling and supporting legislation necessitated the maintenance of favorable relations with Members of Congress. Wilson's experience and personal contacts in Congress facilitated the passage of much agricultural legislation. This ability of Tama Jim was pointed out by President Taft, who described Wilson as one

. . . who knew politics and was a good politician. He was familiar with the ways of the Senate and the House of Representatives, and knew how to lay the business of his Department before legislative committees (388, pp. 150-151).

His first Assistant Secretary, Joseph H. Brigham, who served from March 23, 1897, to his death on June 29, 1904, had been instrumental in securing the passage of the act establishing the Ohio Experiment Station in 1882, and later served on its board of control. As master of the Ohio State Grange and master of the National Grange, he had promoted the passage of the Hatch Experiment Station Act of 1887 and the act of 1890 providing annual subsidies to land-grant colleges for instruction in agriculture and mechanic arts. In the Department of Agriculture he spent much of his time, as chairman of the various boards of management of the Government, arranging international and national expositions (230, p. 187).

In his second Assistant Secretary, Willet M. Hays, who was appointed in December 1904, Tama Jim found an associate with similar interest in scientific work, agricultural education, and farm management. He had previously served as director of the North

Dakota Experiment Station and as professor of agriculture at the University of Minnesota where he was also associated with the experiment station. In addition, he had become known for his work in plant breeding and had developed several strains of wheat in use in the Middle West. In 1900, he had organized the American Breeders Association. His appointment was endorsed by representatives of a number of State universities, agricultural colleges, the agricultural press, and organizations in various sections of the country.² Hays maintained his close relationship with the State colleges and experiment stations during his term, the longest of any Assistant Secretary of Agriculture. During most of this time he was engaged in promoting agricultural education and extension work and advancing the Association of Agricultural Colleges and Experiment Stations (230, pp. 187-188).

The growth of the Department during this era resulted from the expansion of the scientific and regulatory functions and the addition of such new activities as the demonstration work of Seaman A. Knapp and the farm management work directed by W. J. Spillman. As a result, the staff increased from 2,444 regular employees in the fiscal year 1897 to 2,815 employees in Washington and 11,043 in the field in the fiscal year 1912.³ During the same period, the amount disbursed increased from \$3,636,264 for the fiscal year 1897 to \$21,103,646 for the fiscal year 1912.⁴

Generally, scientific work was promoted without hesitation, but Tama Jim was more conservative when it came to some other changes. Believing that motion pictures were "of the devil," he opposed the use of them in the Department, but before he left office he had been converted and motion pictures had been made a part of the work of several bureaus. Another innovation that he frowned on was the automobile. But by 1912 he had approved the purchase of one for use at the Beltsville farm, though with the understanding that it was not to be a precedent for others (322, pp. 114-115).

The period was also marked by the reorganization of much of the work of the Department. The first step was taken on March 23, 1897, when Charles W. Dabney, formerly Assistant Secretary, was appointed as "Special Agent in Charge of Scientific and Statistical Investigations."⁵ He was to supervise this work and make recommendations to the Secretary. After Dabney left the Department, the position was terminated by a Secretary's memorandum of September 30, 1897. It directed all bureaus, divisions, and offices to report directly to the Secretary. Previously organized primarily into independent divisions, offices, and sections, many allied lines of work were consolidated when the Bureau of Plant Industry was established in 1901, the Bureau of Soils in 1901, the Bureau of Statistics in 1903, the Bureau of Chemistry in 1901, the Bureau of Entomology in 1904, the Bureau of Biological Survey in 1905, and the Bureau of Forestry in 1901. In 1905, the Bureau of Forestry became the Forest Service.⁶

Though the establishment of these bureaus raised the level of the

organizational units, in actual practice the primary emphasis during the administration of Secretary Wilson was on lines of work directed by prominent individuals rather than on administrative units. In general, subordinate units were organized on an informal basis and were referred to loosely as offices, investigations, or projects. Informality was fostered by Secretary Wilson, who made a point of knowing who the scientists were and what they were doing. He frequently visited the laboratories in the buildings that were clustered in the vicinity of the main building of the Department.

Although Secretary Wilson stressed informality, he took several steps toward centralization. By General Order 85 of June 17, 1905, he appointed George P. McCabe as Solicitor of the Department, thereby consolidating legal activities of the entire agency. In 1910 his position was strengthened by General Order 140. At a meeting of the bureau chiefs on May 11, 1906, the Departmental Council was established. By monthly meetings of the top officials in the Department, the Council was to promote cooperation, bring about a better understanding of work conducted, and advance the general welfare. The last of these meetings to be recorded was held on January 3, 1910. Perhaps this Council recommended the institution by 1908 of a central system of project statements in the Secretary's Office. These included a plan for each line of work in the Department (322, pp. 119-121, 159).

Scientific Activities

Scientists elsewhere contributed knowledge basic to some of the scientific investigation in the Department. In 1900, Mendel's laws on heredity were rediscovered and verified. In 1902, Hugo De Vries, a Dutch botanist, announced his mutation theory of evolution, based on studies of the evening primrose. In 1904, Thomas Hunt Morgan began using "gene," in his experiments testing Mendel's laws, to describe individual parts of chromosomes controlling particular characteristics. He announced his gene theory in 1912. The theories of De Vries and Morgan provided bases for work in breeding and the science of genetics (56).

Scientific research in the Department of Agriculture stressed the increase of production on land under cultivation and efficiency in livestock production for greater output. In the main, this related to plant and animal life, soils, nutrition, and chemical research.

Bureau of Plant Industry

When Tama Jim became Secretary in 1897, research on plant life and related fields was conducted by different divisions, offices, and

sections. Their merger to form the Bureau of Plant Industry on July 1, 1901, with Beverly T. Galloway as Chief, emphasized the increased importance of this work. During the decade to follow it was to be expanded and new lines added. Galloway surrounded himself with a galaxy of brilliant plant scientists.

Several steps were taken preparatory to establishment of the Bureau of Plant Industry (212). On June 30, 1898, the Office of Fiber Investigations was combined with the Division of Botany. On September 14, 1900, the Experimental Gardens and Grounds unit was placed in charge of the Chief of the Division of Vegetable Physiology and Pathology by General Order 29. On October 1, 1900, the Secretary issued General Order 31 further unifying the work by designating the Superintendent of Gardens and Grounds, Beverly T. Galloway, as Director of Plant Industry and directed the Chiefs of the Divisions of Vegetable Physiology and Pathology, Agrostology, and Pomology to confer with the Director on matters of general policy. On December 1, 1900, the Chief of the Section of Seed and Plant Introduction was also directed to confer with Galloway on policy matters. On March 1, 1901, the Section was placed under the Director. Then on April 10, 1901, the Arlington Experimental Farm, which had been established after an act of Congress on April 18, 1900, transferring 400 acres from the War Department to the Department of Agriculture, was placed under the supervision of the Director of the Office of Plant Industry.⁷

On July 1, 1901, the Bureau of Plant Industry was established. The responsibility for congressional seed distribution was assigned to the new Bureau (304, 1912, pp. 117-144). From this time on, the units of organization were usually referred to as offices, laboratories, or investigations, a situation that was to continue until April 22, 1931.⁸

Some lines of work developed within the Bureau of Plant Industry later became independent organizational units or were transferred to other bureaus. In 1902, W. J. Spillman began to make surveys, sometimes called farm demonstrations. These were continued by the Office of Farm Management, which was established within the Bureau in 1905. Cooperative extension work was begun in the South under the supervision of Seaman A. Knapp in connection with the control of the Mexican boll weevil. This work was rapidly expanded by private as well as Federal financial support. The Bureau also conducted studies relating to marketing of agricultural commodities, including grain and cotton standardization.

The rapid infestation of the cotton region by the Mexican boll weevil necessitated concerted remedial action. In 1904, following a year of heavy damage to the cotton crop, Seaman A. Knapp was assigned special agents to conduct control activities in Arkansas, Louisiana, and Texas. Knapp, an old friend of Tama Jim, had been a professor of agriculture and president of Iowa Agricultural College before he moved to the South in 1885. From this time on,

he was connected in one way or another with some phase of southern agriculture. In 1898, he was appointed as a statistical agent of the Department of Agriculture to report on cotton. Following this he was employed as an agricultural explorer and brought back to the United States a Japanese short-grained rice adapted to production in drier areas of Texas and Louisiana. On July 1, 1902, he was appointed as a special agent of the Department in the South where his work with rice cultivation attracted the attention of those concerned about the threat of the boll weevil to cotton production.⁹ Early in 1903, Knapp recommended the improvement of methods of cotton production as a means of increasing output and profits. A privately financed demonstration was conducted under his direction in Terrell, Texas. In 1904, Federal funds became available for Knapp's use in connection with the control of the Mexican boll weevil.

His method of seeking the cooperation of the State and local organizations, working with and through farmers, and utilizing demonstration fields to illustrate selection and better production methods proved most successful. The favorable results of his work attracted the attention of the General Education Board, which had been organized in 1902 by John D. Rockefeller to promote education. In 1906, the board agreed to give financial support to the demonstrations under Knapp's direction in States not infested by the boll weevil. As the weevil advanced and the demonstrations shifted to include its control, the Federal Government assumed financial responsibility for it in infested areas and the funds of the General Education Board supported work in additional areas not infested (228, pp. 61-62).

Knapp expanded the scope of his activities in an attempt to bring the entire farm family into his educational program. About 1907, he organized boys' corn clubs, from which developed calf clubs, pig clubs, potato clubs and, later, the 4-H Clubs. For the girls, canning clubs were formed, and home demonstration work with women rounded out his program for the farm family. This practical cooperation of representatives of the Federal Government with rural groups gained popularity and showed the potential use of Knapp's direct methods as an educational tool to be used by agricultural colleges. Following Seaman Knapp's death in 1911, his work was continued by his son, Bradford Knapp, who used methods instituted by his father, but at the same time began to strengthen the ties with the agricultural colleges (22; 52, pp. 51-82).

While the work of Seaman Knapp in the South had been undertaken to meet an urgent need, that of W. J. Spillman, primarily in the North and West, on farm management, reflected, in part, a new interest in economic questions relating to agriculture which had developed in educational centers (220, pp. 80-81). During the fiscal year 1901-02, surveys and studies were begun under the supervision of Spillman.¹⁰ He was at the time an agronomist in

charge of grass and forage plant investigation; later he was to be Chief of the Office of Farm Management, established in 1905. Studies were made of farming conditions and practices in various sections of the country, especially among the most successful farms. On the basis of these, plans were drawn up to put into operation more efficient systems of farm management. Information was made available to producers through summarizing publications. In certain areas, especially where single-crop farming prevailed, systems of diversification were started. The aim of these farms, supervised by representatives of the Department of Agriculture, was to attract attention of local farmers to profits that might be received by changing production practices. By 1908, studies had been made on business management of the most successful farms, including financial records, farm equipment, feeding systems, and general farm records. These were referred to thereafter as "cost of production studies" (304, 1903, p. 36; 49; 222).

By 1911, the Office of Farm Management was planning its part in what it was to call extension work, to meet the need for reorganizing agriculture in many sections of the country. While Knapp in the Farmers' Cooperative Demonstration Work in the South had stressed working through farmers as instructors of other farmers, Spillman had used college-trained men organized on a district basis and had worked in close conjunction with the State agricultural colleges and experiment stations. His demonstration work, concentrated in the Northern and Western States, became an expeditious channel for dispersing results immediately to the farmer. It was expanded as additional funds became available and was finally consolidated with that started by Knapp (228, pp. 73-74; 134, pp. 1-5; 205).

Scientific activities begun by predecessor components were continued and expanded by the Bureau of Plant Industry. These included research in diseases and pathological conditions in plants and plant products, and plant physiology, nutrition, and breeding. To this research was added some work, such as the tea culture experiments, revived from an earlier period. Other work was added or given official recognition as need arose. After Congress authorized, in 1898, the testing of seeds purchased on the open market and the publication, at the discretion of the Secretary, of the names of seedsmen whose seeds were found to be substandard, the Botany Division was assigned the testing of seeds. In the same year, agricultural plant explorations were authorized (177, p. 8). As cultivation of the semiarid areas of the Great Plains was expanded, the existence of problems was realized. Though the Department had conducted a number of studies in dryland agriculture, a demand for more concentrated work in the field led to the formal development in 1906 of such a program in an office of dryland agriculture (304, 1906, p. 67).

Though the Commissioners and previous Secretaries of Agriculture had sent abroad agents or explorers to collect seeds and plants

and United States representatives abroad had sent home seeds and plants, the work on plant and seed introduction was formally authorized in the appropriation act passed March 22, 1898. This allocated \$20,000 for the collection, purchase, testing and preparation of foreign seeds, plants, bulbs, shrubs, and trees.¹¹

David G. Fairchild, who had previously served as a special agent of the Department in this field, was put in charge of the new section within the Seed Division. Fairchild had drawn up a detailed plan, outlining the purpose of his section and acknowledging the importance of inspection of materials so introduced to prevent importation of diseases or insect pests. Even before the section was established, a deluge of plant materials began arriving from N. E. Hansen in Russia. He had been sent soon after Wilson became Secretary with instructions to look for cold-resistant fruits and cereals adaptable to the Great Plains. To other parts of the world went plant explorers whose names were to be associated with the renowned pioneers in the field—Frank N. Meyer, Seaman A. Knapp, and Mark Carleton. They usually explored dry areas. Fairchild himself joined the ranks of the explorers, leaving the administration of the program to others. Materials so collected and sent to the United States were distributed to State experiment stations, nurserymen, private individuals, and plant breeders, or were placed in the special departmental plant introduction stations, of which six had been established by 1912 in various geographical areas (73, 126).

Many of the plants and seeds sent back by the agricultural explorers were found to be economically impractical in America, but others contributed to greater diversification or to increased volume of output for crops in cultivation. Short-grain Japanese rice brought in by Seaman A. Knapp served as a stimulus to rice growing in southern Louisiana and Texas to such an extent that the new industry presented great competition with that of South Carolina. Mark Carleton helped establish on a firm basis the growing of hard red winter and durum wheat by his introduction of Kharkof and Kubanka from Russia. David Fairchild and others sent back such valuable additions as hairy Peruvian alfalfa, sweet peppers from Venice, cuttings of seedless grapes from Padua, grain sorghum "Feterita" from Egypt, Egyptian cotton, rice from China, tung trees, dates and figs, mangoes, and other semitropical fruits, and ornamental shrubs and flowers (304, 1912, pp. 117-122).

Another valuable contribution was made in 1912 when commercial seed and grain firms introduced Marquis wheat into the United States. It had been developed in Canada by C. E. Saunders. Its early maturity enabling it to escape rusts; its high yield and its excellent quality for milling and breadmaking were to make it one of the leading hard red spring wheats in the country. As parent in later crosses it was to pass on superior characteristics through new strains of wheat (51, 157).

Plant breeding was closely related to plant introduction activities

in the Bureau of Plant Industry. This was directed to the development of new seeds, plants, or trees that would develop a new product, a more marketable one, a greater yield, insect- or disease-resistant strains, be adapted to a more varied growing area, or be less affected by adverse growing conditions. The plant materials and seeds sent by the special agents abroad were used in part in this experimentation. Attention was given especially to fruits, cereals, forage crops, tobacco, and cotton (99).

An outstanding example of this research was that of William Orton, a plant pathologist from Maine. In 1899, he was assigned responsibility for developing a wilt-resistant variety of cotton. By applying his theory of selective breeding, he produced such a plant. His theory of selectivity continued to be used by others in plant breeding research (168).

Bureau of Entomology

Until the later 1890's the entomological research of the Department consisted primarily of identification and the studies of the life histories of insects and the development of methods of control and eradication for use by farmers. Frequently entomologists were assigned to study problems in particular areas. Under the leadership of L. O. Howard, the work was expanded into the field of economic entomology. Expansion of the work and its increasing importance was indicated by larger appropriation of funds, the elevation of the Division of Entomology to bureau status on July 1, 1904, and the increase in the number of laboratories from one in Washington in 1897 to 35 field laboratories located in various sections of the country by 1913. Work included studies of and measures for the control of insect and plant pests, including the Mexican boll weevil, gypsy and brown-tail moths, San Jose scale, and insects as disease carriers. Recognizing that some plant pests and insects were brought in with the materials sent by the agricultural explorers, the Bureau of Entomology began inspecting these introductions of the Bureau of Plant Industry in 1906. In 1909, inspection of nursery stock and other plants was expanded by the establishment of voluntary cooperative State and Federal inspection of such commercial imports (381, pp. 11-47; 114).

Faced with an increasing variety of insect pests and diseases and with the expansion of areas infested, representatives of the Department increased their efforts to secure Federal legislation for plant inspection and quarantine (382, p. 10). Finally, on August 20, 1912, the Plant Quarantine Act, promoted by C. L. Marlatt of the Bureau of Entomology, was approved.¹² It provided for the regulation of the importation and interstate shipment of plants and other commodities to prevent the introduction and spread of plant pests and diseases and for the appointment of the Federal Horticultural Board to administer the act. The following day Secretary Wilson

designated representatives from the Bureaus of Entomology and Plant Industry and the Forest Service to serve as members of the Board, with C. L. Marlatt as Chairman.¹³

Bureau of Chemistry

Chemical work of the Department carried on by the Division of Chemistry and its successor bureau was expanded from chemical research alone to include regulatory and related functions. An increasing amount of work was being done for other bureaus and governmental agencies. In addition, assistance was given to producers and industry in solving chemical problems in the distribution and handling of agricultural commodities.

The growing importance of the work conducted by the Division of Chemistry and its laboratories was recognized when, on July 1, 1901, it was redesignated as the Bureau of Chemistry. Gradually some of the laboratories were renamed divisions as work was expanded or combined. On July 1, 1904, the Division of Tests was established to study road materials and other materials for agricultural construction, part of which had been under the jurisdiction of the Road Material Laboratory, established October 10, 1900. Also on July 1, 1904, a Division of Foods was organized around functions of the former Food Laboratory. On January 1, 1908, the Drug Laboratory was redesignated the Division of Drugs. On July 1, 1908, the Miscellaneous Laboratory, formerly the Insecticide and Agricultural Water Laboratory, became the Miscellaneous Division.¹⁴

The most publicized activities of the Division of Chemistry, and later of the Bureau, were the investigations carried on under the supervision of Harvey W. Wiley. These led to the passage of the Food and Drugs Act of June 30, 1906, and, thereafter, concerned its enforcement. Wiley, who had received his training in chemistry and medicine, was well qualified to direct research in the nutritive properties of food, its adulteration, and the detection of such adulteration. He and his associates in their crusade for remedial measures actively publicized their findings. When the Senate Committee on Manufactures conducted hearings, from March 7, 1899, to January 20, 1900, in Washington, Chicago, and New York, on the character and extent of food adulteration in the United States, Wiley served as a scientific expert to advise the committee, and the Division made tests of several hundred samples of food most subject to adulteration. Following the report of the committee, several remedial bills were introduced. Despite strong opposition, the bill drafted by Wiley and introduced by Senator W. B. Heyburn was approved (380; 390, pp. 198-230).

The Food and Drugs Act provided for "preventing the manufacture, sale, or transportation of adulterated or misbranded or poisonous or deleterious foods, drugs, medicines, and liquors, and for

regulating traffic therein.”¹⁵ A committee, appointed by the Secretaries of Agriculture, Commerce and Labor, and Treasury to draw up regulations for the administration of the act, promulgated its decisions on October 17, 1906. The Bureau of Chemistry was to examine samples of foods and drugs to determine adulteration or misbranding. Anticipating this assignment, the Bureau had appointed inspectors and established a number of inspection laboratories. The Secretary appointed a Board of Food and Drug Inspection with Wiley as chairman to consider interpretation of the law and questions arising thereunder. It was to hold hearings on alleged violations.¹⁶ Soon after the law became effective, Wiley, who believed in its strict interpretation, antagonized a number of large manufacturers of food products by his stand on the definition and legality of the use of certain food adjuncts and preservatives. They appealed to President Roosevelt. At his request, Secretary Wilson appointed on February 20, 1908, the “Referee Board” of consulting scientists to consider such scientific questions relating to the Food and Drugs Act as he might refer to it.¹⁷ In reality, it served as a buffer between the Board led by Wiley and the Secretary.

Wiley's efforts in interpreting the act had by the end of the 1912 fiscal year resulted in 3,456 cases of violations being reported to the Attorney General with 1,226 convictions and \$47,982 imposed in fines; and 1,296 seizures of food and drugs with 867 decrees of forfeiture or condemnation (304, 1912, p. 252). On March 15, 1912, Wiley's resignation ended a stormy career. He was succeeded by Carl Alsberg, who placed greater emphasis on nonregulatory work of the Bureau (19, 390).

Another regulatory function closely related to the work of the Bureau concerned the legislation that was designed to control insecticides and fungicides. Though research on insecticides had been conducted previously, it was given greater recognition when an Insecticide and Fungicide Laboratory was established by a special order of the Secretary, June 23, 1908. On the basis of data obtained by it and by the Bureau of Entomology, the Insecticide and Fungicide Act was approved on April 26, 1910. This prohibited the interstate shipment for sale of any adulterated or misbranded insecticide or fungicide.¹⁸ Its enforcement was assigned to the Insecticide and Fungicide Board, appointed by Secretary Wilson in a special order on December 22, 1910. The Insecticide Laboratory of the Bureau of Chemistry performed much analytical work on samples collected. Moreover, one of the four members of the Board was from the Bureau (304, 1912, pp. 198-199).

Though the activities relating to food, drugs, and insecticides received the most publicity and the greatest emphasis, investigations of the Bureau were directed also to the development of methods of analysis and chemical research and to analysis of road materials, soils and fertilizers, leather and paper materials, mineral waters, cattle food, plant chemistry, and farm wastes.

Bureau of Animal Industry

Although the passage of the regulatory Food and Drugs Act and the Insecticide Act had been responsible for much of the expansion in the Bureau of Chemistry during the period 1897-1912, the Bureau of Animal Industry had at the opening of the period been concerned primarily with meat and livestock inspection under previous legislation and research in animal diseases. These regulatory functions of the Bureau of Animal Industry were expanded by the Renovated Butter Act of May 9, 1902, the Livestock Quarantine Act of March 3, 1905, and the amendment to the Meat Inspection Act on June 30, 1906.¹⁹ As a result, a network of inspection stations was established throughout the country.

Federal, State, and local agencies cooperated in the control of many animal diseases. The Bureau continued its fight against the foot-and-mouth disease. In 1899, the first order was issued for the inspection of sheep for sheep scab by Federal inspectors, who were to supervise the dipping and treatment of infected animals. In 1906, work was begun to systematically exterminate the Texas fever ticks. The following year the Bureau began to cooperate actively with herd owners and State and city officials in the eradication of bovine tuberculosis in dairy herds by a testing program (*304, 1912, pp. 162-173*).

Scientific investigations were expanded to include other diseases. One of the most important of these investigations was the work of Marion Dorset with hog cholera. In 1903, he discovered that the disease was caused by a micro-organism too small for microscopic identification. In 1906, he discovered a preventative and curative serum which led to the control of the disease. A further contribution of Dorset was his discovery in 1907 of a branding ink for use in meat inspection (*111, pp. 159-163*).

Work in animal husbandry was first recognized as a separate line of work on July 1, 1901. In 1904, a specific appropriation of \$25,000 was made for experiments in animal feeding and breeding. On January 1, 1910, the Animal Husbandry Division was established by an order of the Secretary. The expansion of the practical application was further strengthened when in 1910 a farm of 475 acres near Beltsville, Md., was purchased for use by the Bureau as a demonstration center (*260, 1911, p. 253*).

The Dairy Division of the Bureau of Animal Industry, established in 1895, had compiled and published data on dairy conditions and the most approved methods of production. Experimental and extension activities were begun in 1897. Laboratory work was initiated in 1902 in all branches of dairy industry. Cow-testing associations or cooperative clubs were promoted to record feed and production for individual cows. Beginning in 1912, bull associations or clubs were promoted for the cooperative purchasing of selected purebred bulls to improve dairy herds. In-

vestigations and demonstrations were conducted on market milk, creameries and cheese factories, and related subjects (42, pp. 1-16).

Bureau of Soils

Soils work in the Department has reflected the interest of a group of dedicated men. Charles Dabney, Jr., Assistant Secretary of Agriculture under Secretary Morton, had promoted soils investigations. In 1894, he had insisted upon the publication of *Farmers' Bulletin No. 20, Washed Soils: How To Prevent and Reclaim Them*, now considered a milestone in soil conservation. In 1898, soils surveys were begun under the supervision of Milton Whitney. Later, Curtis F. Marbut directed the surveys. Charles E. Kellogg has described this early work as follows:

The westward agricultural expansion after the Civil War was generally successful but this success concealed hundreds of thousands of heartbreaking failures. The success of individual settlers was largely a matter of chance. Those that got onto good soils had a chance to succeed; those that got on poor soil were doomed to failure. Thoughtful agriculturists were looking for ways to prevent these failures. This was the main reason for establishing the Soil Survey. Other secondary ones were the search for soils suitable for new crops and the need for guidance in the use of fertilizers and other new practices.

At the time the Soil Survey began, little was known about the soils of the United States. Most of what we now know came through the Soil Survey, which was cooperative with all the land-grant colleges. Although the older surveys are not adequate by modern standards, these early soil scientists did a remarkable job of making useful maps during their learning process.

Actual field mapping of soils was begun in 1899, but no specific appropriation was earmarked for the work until 1909. Funds were appropriated in 1899 for an investigation of the relationship of soils to seepage and drainage waters.

In the reorganization of the Department on July 1, 1901, the expansion of the soils work was recognized by the redesignation of the Division as the Bureau of Soils. Soil surveys led to other work. For example, the new Bureau named types of soils and distributed samples to State agricultural colleges for use in testing and identification. Investigations in soil management were begun in 1902, and a Division of Soil Management was established that year. As early as 1904, investigations were made of soil fertility, and though continued with some regularity, they were not recognized by a specific appropriation until 1912. Closely related to these was the work of locating possible sources of potash, nitrates, and other natural fertilizers. In 1912, a cooperative project was undertaken with the Forest Service to segregate and classify agricultural lands within National Forests (379, pp. 89-105).

Forest Service

The expansion of the forestry work of the Department and the increasing interest in conservation attracted the attention of the public during Tama Jim's administration. The appointment of Gifford Pinchot, a friend of Theodore Roosevelt, as Chief of the Forestry Division on July 1, 1898, provided leadership for a more aggressive policy, which was to include conservation of resources (206, p. 27-56; 304, 1912, pp. 229-243). Previously the Division had operated primarily as an information agency. On October 15, 1898, it offered assistance to timber owners in applying sound forestry practices to their holdings. The expansion of this work was recognized by its elevation to the status of the Bureau of Forestry on July 1, 1901.

At the turn of the century the forestry work of the Federal Government was performed by the Forestry Division of the Department of Agriculture, and the Geological Survey and General Land Office of the Department of the Interior. The Industrial Commission, established by an act of Congress of June 18, 1898, to consider and recommend legislation to meet problems presented by agriculture, labor, and capital, recommended in its final report in 1902 that forestry investigations and administrative work be combined in one organizational unit and that the setting aside of Forest Reserves be expanded (341, vol. 19, p. 200). After much discussion and through the efforts of the American Forestry Congress, the Forest Reserves, administered by the General Land Office of the Interior Department, were transferred to the Department of Agriculture on February 1, 1905. A new unit, the Forest Service, was established in the Bureau of Forestry to administer them.²⁰ On February 2, 1905, Secretary Wilson issued instructions to the Forester that the Forest Reserves were for the benefit of all the people and not for the temporary benefit of individuals or companies in the protection and use of water resources, the disposition of forest products, the use of the range, and other aspects of their management. On July 1, 1905, the entire Bureau was redesignated the Forest Service. On July 1, 1907, the Forest Reserves were renamed National Forests.²¹

President Theodore Roosevelt actively promoted conservation of forest and other resources. He continued to set aside lands for Forest Reserves. During his Presidency, 1901-09, more than 148 million acres became National Forests. By an act approved May 23, 1908, Congress provided that 25 percent of receipts of National Forests be paid to the States for use on public schools and roads of the counties in which the National Forests were located.²² Moreover, in March 1908, Roosevelt called a meeting of State Governors, which met as the White House Conference on Conservation from May 13 to May 15, 1908. On June 8, 1908, he appointed the National Commission on Conservation with Gifford Pinchot as Chairman. The report submitted the following year was an inventory

of national resources. This further stimulated interest in conservation and led to the meeting on August 26, 1909, of the North American Conservation Conference, which it was hoped would culminate in a World Conservation Conference (175, pp. 344-367).

Another body on which Pinchot acted was the Country Life Commission. Appointed by President Roosevelt on August 10, 1908, the Commission made its study of rural life, and submitted its report to Congress in February 1909. No action was taken on its findings until the Rural Organization Service was organized in the Department of Agriculture in 1913. The Service was financed by funds of the General Education Board (301, 69).

In all his service, Pinchot had zealously carried out the instructions given him by Secretary Wilson in 1905 and was especially sensitive of the changes in policy which came with the new Presidential administration in March 1909. His views of the future of conservation and the Forest Service were at variance with the new administration and eventually led to his departure from the Department of Agriculture on January 7, 1910 (175, pp. 372-458).

When Henry Graves succeeded to the post of Chief of the Forest Service, a number of changes were made, most of which limited the autonomous action of the Service (206, p. 39). After a brief setback, the movement begun by Pinchot surged forward. On March 1, 1911, the Weeks law was approved, in part as a result of extensive forest fires in 1910. Its purpose included the protection of watersheds of navigable streams. It provided for the appointment of a National Forestry Reservation Commission. It marked a change in policy by the establishment of the principle of the purchase of lands for National Forests by the Secretary of Agriculture with the approval of the Commission. Furthermore, it introduced a plan for Federal contribution to State fire suppression agencies. The need for roads and trails within the National Forests had been shown in the forest fires of 1910. The Appropriation Act of August 10, 1912, provided that 10 percent of all forests receipts for fiscal year 1912 should be used for roads and trails within the National Forests in the States where the money had been received. The Appropriation Act, approved March 4, 1913, made this arrangement permanent.²³

Bureau of Biological Survey

Another form of conservation operation carried on by the Department was that of the Division of Biological Survey, so designated in 1896. Earlier, entomologists of the Department, in response to requests from farmers, had studied the overall effects of insects and birds on farm production. The new Division placed primary emphasis on surveys of distribution, food habits, and migration of birds and animals. Information collected was to be used in controlling harmful species while protecting those

beneficial and desirable. The Lacey Act, passed on May 25, 1900, provided for expansion of the work of the Division and the active participation of the Federal Government in wildlife conservation. The act, serving as the basis for later legislation, controlled the importation of wild birds and animals and protected domestic wild birds and game.²⁴ This policy was furthered by the issuance of an Executive order on March 3, 1903, establishing the first of the Federal bird refuges, on Pelican Island off the coast of Florida. The expansion of the work led to the redesignation on July 1, 1905, of the Division as the Bureau of Biological Survey. Shortly thereafter the emphasis in the work shifted somewhat from biological exploration, as such, to the economic relationship of wildlife conservation and the destruction of species harmful to agricultural production (*41, pp. 85-86*).

Weather Bureau

The scope of the activities of the Weather Bureau, its services, and efficiency were increased during the 16 years that James Wilson was Secretary of Agriculture. Before Secretary Wilson's administration, the Bureau's observations were confined to the continental United States. During the Spanish-American War, they were extended to the West Indies and Mexico; in 1900, to the British Isles, Europe, Bermuda, and the Azores; and in 1907, to Asia and Alaska. In 1904, upon the recommendation of the Board on Wireless Telegraphy and the approval of the President, ocean meteorological work and the making of observations at sea were transferred to the Weather Bureau from the Hydrographic Office of the Navy Department. In part, the accuracy and expansion of services were due to the development of new or improved measuring devices and adoption of new methods such as the use of kites and balloons to determine meteorological conditions in the upper air (*304, 1912, pp. 176-191*).

Office of Public Roads

Of particular interest to producers, an aspect of work at this time making progress in the Department of Agriculture was road-building and road materials research. In this era, when little direct Federal aid was given to State and local work, the activity was primarily of a demonstrational or educational nature. The work was carried on first by the Office of Road Inquiry, then supplemented in 1900 by the establishment of the Road Material Laboratory of the Division of Chemistry, and later strengthened by the merger of the two, in 1905, to form the Office of Public Roads. Activities included the construction of object-lesson roads

under the supervision of engineers of the Office at local expense; the testing and evaluation of road materials; and the collection, compilation, and dissemination of material on road construction and management. From 1897 through 1912, 343 object-lesson or experimental roads were constructed (*108, pp. 7-15; 304, 1912, pp. 207-211*). Finally, in 1912, an appropriation was made for the construction of post roads under the supervision of the Department of Agriculture. To obtain funds under the act, the States and localities had to contribute \$2 for every \$1 contributed by the Federal Government.²⁵

Office of Experiment Stations

Unlike most of the other large agencies of the Department whose activities were somewhat restricted, those directed or conducted by the Office of Experiment Stations under Alfred C. True cut across the field of scientific research and included agricultural education. Research carried on by the State experiment stations was closely related to the local agricultural colleges and until 1906 only loosely tied to the Federal Department of Agriculture. However, when insular and territorial stations were established, they were placed under the direct supervision of the Office of Experiment Stations. Such establishments were started in Alaska in 1898, Hawaii and Puerto Rico in 1901, and Guam in 1908. When the Adams Act was approved March 16, 1906, Federal funds available to the State experiment stations were doubled and the Office of Experiment Stations was directed to supervise more closely the projects thereby supported.²⁶

In fostering agricultural education, True cooperated closely with the Association of American Agricultural Colleges and Experiment Stations. Beginning in 1902, he served as dean of the Graduate School of Agriculture, established to meet the need for more graduate training in agriculture. Five summer sessions of this Graduate School had been held by 1912 on various university campuses. Assistance and encouragement were given to the introduction or expansion of agricultural education in elementary and secondary schools and at the undergraduate and graduate college level. To supplement the educational service rendered through formal educational systems, the appointment of a "farmers' institute specialist" was authorized by Congress in 1903. On April 1, 1903, such an appointment was made and the educational program of the Office was expanded to include farmers' institutes (*55, pp. 58-87; 230, pp. 204-210; 304, 1912, pp. 211-229*).

The third phase of the work under the supervision of True was specially assigned scientific work. This included the nutrition studies begun under W. O. Atwater during the 1895 fiscal year, the irrigation investigations undertaken in 1898, and the drainage studies instituted in 1902.

Responsibility for irrigation investigations was assigned to the Office in 1898, after a special appropriation was made; the research was placed under the supervision of Elwood Mead. A survey was made of existing laws in the United States and other countries to determine bases upon which further legislation might be drafted. Other problems studied included water rights and their administration, the function of water, methods and costs of pumping and storing, prevention of waste in distribution, and the quantity required by different crops and methods of cultivation.

Closely related to the irrigation investigations were those on drainage. Finding that certain subsoil conditions in irrigated areas were creating problems for producers, supplementary drainage work was begun in 1902. Work was later extended to include drainage activities in the subhumid regions, and a large volume of technical data was collected on area problems (55, pp. 87-94).

The continuation of the nutrition studies which had been started by Atwater and continued by others reflected a developing interest of the Government in this field. The respiration calorimeter was perfected and used in the determination of the utilization of food and the expenditure of energy by the human body. The Department made studies of the effect of cooking on the nutritive value and digestibility of food. Dietary investigations furnished information on food habits and facilitated the establishment of dietary standards for home or institutional use (55, pp. 95-96; 29, pp. 21-29; 224).

Statistical Activities

While scientific research previously underway was broadened and expanded by the addition of new projects and new regulatory and service activities, statistical work was given relatively less emphasis in the enlarged Department. But, accuracy of results was stressed, premature release of information useful for speculation became a subject of concern, and the scope of studies was broadened. In May 1899, the *Monthly Crop Reporter* was first published. Its announced purpose was to make available to the public information in monthly crop reports and special surveys.

At the beginning of James Wilson's administration, the statistical work was divided between the Section of Foreign Markets and the Division of Statistics. On July 1, 1902, the Section was raised to divisional status and soon after placed under the direction of the Statistician. On July 1, 1903, the two divisions were merged to form the Bureau of Statistics. Three divisions were set up: Domestic Crop Reports, Foreign Markets, and Miscellaneous. Essentially, this organization continued until 1908, when the Division of Foreign Markets was redesignated the Division of Production and Distribution; at the same time the Miscellaneous Divi-

sion became the Editorial Division. The Editorial Division later was renamed the Division of Reference and Research (300, 1912, pp. 90-95).

Of continuing importance was the establishment of the Crop Reporting Board, in 1905, and the issuance by Secretary Wilson of instructions to insure secrecy of crop reports and to increase their accuracy. Occasioned by a premature release of information relating to a crop report, this pattern, reinforced by legislation in 1909, has been continued to the present time.

Although the crop reports were considered the most important work of the Bureau of Statistics, it also furnished assistance to other bureaus upon request, and conducted special surveys. These increased in number and became more than simple statistical studies. Among subjects included were wages of farm labor, marketing and transportation of agricultural commodities, activities of railroad companies in promoting agriculture, purchasing power of farm products, cost of production of agricultural goods, and foreign trade.

Interest in Marketing and Regulatory Activities

In an era which gave primary emphasis to scientific research and other activities to increase production, some work was done on distribution, economic research, and related activities paralleling the growth of interest outside of the Department in the economic phases of agriculture. Within the Department, it was mainly in connection with scientific or statistical functions in various bureaus. Some of it was directed at expanding or retaining foreign markets for our agricultural products. Other aspects related to problems involved in the transfer of commodities from producer to consumer. Undertaken primarily by men with scientific training, the findings of studies stressed their disciplines. But it represented an almost imperceptibly broadening outlook of the Department. These studies and activities laid the foundation for later expansion of research in economics, with its related services and regulatory activities.

In Wilson's first years as Secretary, interest in foreign trade, together with its maintenance and expansion, was a factor influencing lines of work in the Department or the adoption of proposed work. His first Assistant Secretary, Joseph H. Brigham, devoted much of his time, usually serving as chairman of the Government Boards of Management, to arranging for national and international exhibitions. Participation in these was to improve our production and consumption at home and to exhibit "the products and

resources of the country in the hope of increasing our trade abroad." Other efforts at expanding export outlets were made by experimental shipments of products and by sending representatives of the Department abroad. Beginning in 1897, butter from the United States was shipped to Europe, the West Indies, and Asia, with the view to establishing new outlets. For several years, this constituted one of the primary duties of the Dairy Division of the Bureau of Animal Industry (304, 1912, p. 155; 341, vol. 6, pp. 294-296).

Before World War I, special representatives of the Department of Agriculture were not yet a part of our delegations in other countries. The work of Charles W. Stiles as scientific attaché in Berlin in 1898 and his investigation of trichinosis in American pork were pointed out as examples of the benefit that might accrue from the appointment of special agents to study foreign markets, or the addition of agricultural attachés to our embassies. Wilson himself thought that well-trained men from agricultural colleges should be attached to foreign staffs to keep us informed of commodities in demand abroad (341, vol. 10, pp. 686-687; 388, p. 111; 111, p. 88).

In part, regulatory functions were added to protect or promote foreign trade in agricultural products. On February 2, 1903, an act was approved expanding meat inspection of the Department to include, on a permissive basis, exports being shipped to countries where the inspection of imports was required. Attempts at administering this act showed its weaknesses, and in 1906, it was replaced by an amendment to the Meat Inspection Act of 1890. The Food and Drugs Act passed at the same time gave foreign consumers more protection against an inferior product, thereby allaying some criticism abroad. At the same time, regulatory legislation protected production at home. Thus, in 1905, the Livestock Quarantine Act was gaged to control the importation of diseases which might be brought in by imported goods or livestock. A similar measure was approved on August 20, 1912, to prevent the entrance of insects, parasites, and plant diseases on imported goods or stock.²⁷

Phases of problems relating to the distribution of farm products were studied by the Bureau of Statistics and its predecessors, and the Bureau of Chemistry, the Bureau of Animal Industry, and the Bureau of Plant Industry.²⁸

In 1905, such studies were begun informally in the Bureau of Chemistry, and in 1908, were formalized when the Food Research Laboratory was established. These considered the physical aspects of handling, refrigeration, cold storage, and transportation of milk, poultry, and eggs. It was hoped that as a result undesirable products and waste might be eliminated from the market.

Closely related to these were investigations carried on by the Bureau of Animal Industry. Its Dairy Division made a number of studies relating to various aspects of the marketing of dairy prod-

ucts—cost of handling milk, butter inspection in large markets, cheese boards, butter storage, and the like. During the 1911 fiscal year, this Bureau cooperated with the Bureau of Statistics in collecting data on costs, speculation, prices, and consumption changes due to cold storage of animal and poultry products.

The Bureau of Plant Industry likewise investigated related marketing problems, such as harvesting, packing, storing, shipment, and development of fruit markets at home and abroad. These showed the relationship of physical condition to marketability. Studies in cooperative handling and marketing of cotton were undertaken in March 1912 under the supervision of Charles Brand, later Chief of the Office of Markets. After studies of ginning, handling, grading, baling, and marketing conditions were completed, Brand was to coordinate the work of the Department in cotton standardization, breeding, and demonstration. Another project on marketing was begun in the 1912 fiscal year by the Office of Farm Management (263, 1912, p. 439). Methods of preparing farm products for market and the effect of these on prices received, methods of organization and conduct of cooperative marketing, and the difference between prices received by the farmer and those paid by the consumer were segments of the research project. Research to develop methods and procedures for maintaining quality of fruits and vegetables received initial emphasis in 1900, when it was demonstrated that, by means of proper refrigeration, apples and oranges could be shipped long distances and their marketing season prolonged. Work of this type was a function of the Bureau of Plant Industry. Other studies begun on problems of distribution laid the foundation for later service functions such as standardization and grading.

The work in grain standardization was an outgrowth of investigations begun on July 1, 1901. These were to determine the justice of complaints from domestic and European buyers and the extent of nonuniformity in the current grading. Continued on a restricted basis, the work was expanded on July 1, 1906, when the Appropriation Act provided funds. Laboratories were established and studies were made of handling, grading, and transportation of commercial grain in order to learn the facts upon which grades of grain should be based (177, p. 11; 124). These studies continued until the Grain Standards Act was approved, August 11, 1916.²⁹

Similarly, investigations of grading and handling of cotton were underway in the Bureau of Plant Industry in 1907. The Appropriation Act for 1909 provided for the preparation of grade standards (304, 1910, p. 61). Nine grades were later established, and the sale of sets of the standards was authorized. Though the use of these was entirely permissive, they were utilized by many exchanges before the Cotton Futures Act of 1914 required the use of official standards in futures trading in cotton.³⁰

Though the primary responsibility of the Bureau of Statistics

was considered to be the preparation of statistical reports on crops and livestock, it collected information and studied related economic problems of agriculture. These tended to relate less to single commodities than to more general conditions. Many of these were conducted by the Division of Foreign Markets, which, in 1908, became the Division of Production and Distribution. Before this, studies were primarily statistical and related to market conditions abroad and the promotion of the exportation of agricultural products.

In 1906, Victor Olmsted became Chief of the Bureau of Statistics, and by 1908 he had launched studies of economic problems and production and distribution in this country as well as abroad. By July 1912, surveys had been made of production of wealth on farms, distribution of farm products at home and abroad, cost of production of agricultural commodities, and prices received by farmers and prices paid by consumers. Other studies included changes in farm values; transportation of farm products by rail, water, or wagon; cooperative buying and selling; fire, livestock, and other insurance; warehousing; and special problems in marketing specific commodities.

The studies of economic problems by the various bureaus of the Department were supplemented by State bulletins and studies of some cities. Some of the agricultural States issued bulletins on methods and costs of marketing specific commodities. Some cities, notably New York and Philadelphia, studied phases of distribution of agricultural products.

The interest of Congressmen in the problem was aimed at more concerted government attention to problems of marketing food. Thus, in the Appropriation Act for the Department of Agriculture for the 1911 fiscal year, a clause authorized the Secretary "to investigate the cost of food supplies at the farm and to the consumer, and to disseminate the results of such investigation in whatever manner he may deem best." However, no additional funds were allowed for the project. The following year the same action was taken. In the Appropriation Act for 1913, a more specific clause was included. This directed the Secretary to secure from the various branches in the Department reports on systems of marketing farm products followed in various sections of the country and the demand for such products, and to recommend to Congress further investigation on the subject.³¹

Data were gathered and the report prepared under the supervision of George K. Holmes of the Bureau of Statistics (107). By December 26, 1912, when it was submitted to Congress with recommendations for further work by a Division of Markets, other forces had been working for the establishment of a central unit to study marketing problems and needed services.

Beginning in 1911, several bills were introduced which provided for a new unit to study marketing (203). Some recommended its establishment in the Department of Commerce and Labor, but

most of them favored the Department of Agriculture, with the unit as a division of the Bureau of Statistics or as a new bureau. In the discussion, Secretary Wilson expressed preference for a division within the Bureau of Statistics of his Department rather than in the Department of Commerce and Labor (276, p. 181; 142). Though he felt that the work already undertaken should be evaluated, he expressed his willingness to draw up the plan for a division based on the results already accomplished.³² Legislative action was taken in the Appropriation Act for the next fiscal year, 1913-14, when \$50,000 was appropriated, \$10,000 to be available immediately—

. . . to acquire and to diffuse among the people of the United States useful information on subjects connected with the marketing and distributing of farm products, and for the employment of persons and means necessary in the city of Washington and elsewhere.³³

As no specification was made for an organization to carry out this work, the new Secretary, David F. Houston, was given a free hand in drawing up his own plan for the now recognized marketing research in the Department.

¹ 30 Stat. 476.

² The personnel file of Willet M. Hays in the National Archives includes a number of letters of endorsement, including one from J. Worst, North Dakota Agricultural College, July 12, 1904.

³ Information furnished by the Departmental Office of Personnel.

⁴ Information furnished by the Departmental Office of Budget and Finance.

⁵ Memorandum to the Chiefs of Scientific Divisions, Mar. 23, 1897, Secretary's Records, USDA, National Archives.

⁶ 31 Stat. 926; 32 Stat. 297; 32 Stat. 1162; 32 Stat. 296; 33 Stat. 289; 33 Stat. 877; 31 Stat. 929; 33 Stat. 872.

⁷ Secretary's Memorandum, Dec. 1, 1900; General Order 37, Mar. 1, 1901; General Order 39, Apr. 10, 1901, Secretary's Records, USDA, National Archives.

⁸ U.S. Bureau of Plant Industry, Memorandum 576, Apr. 22, 1931, National Archives.

⁹ Personnel File of Seaman A. Knapp, USDA, National Archives.

¹⁰ Ramsay Spillman, A Biography of William Jasper Spillman, typewritten manuscript, 453 pp. (USDA Library).

¹¹ 30 Stat. 337.

¹² 37 Stat. 315.

¹³ Special Order of the Secretary, Aug. 21, 1912, Secretary's Records, USDA, National Archives.

¹⁴ General Order 32, Oct. 10, 1900; Special Orders: June 2, 1904; June 3, 1904; Dec. 26, 107; and June 23, 1908, Secretary's Records, USDA, National Archives.

¹⁵ 34 Stat. 768.

¹⁶ General Order 111, Apr. 25, 1907, Secretary's Records, USDA, National Archives.

¹⁷ Special Order, Feb. 24, 1908, Secretary's Records, USDA, National Archives.

¹⁸ 36 Stat. 331.

¹⁹ 32 Stat. 193; 33 Stat. 1264; 34 Stat. 674.

²⁰ General Order 84, Feb. 1, 1905, Secretary's Records, USDA, National Archives.

²¹ 34 Stat. 1269.

²² 35 Stat. 251.

²³ 36 Stat. 961; 37 Stat. 288, 843.

²⁴ 31 Stat. 187.

²⁵ 37 Stat. 551.

²⁶ 34 Stat. 63.

²⁷ 32 Stat. 791; 33 Stat. 1264; 34 Stat. 674; 37 Stat. 315.

²⁸ U.S. Department of Agriculture, Department Conference on the Marketing and Distribution of Farm Products, Mar. 27, 1913, typewritten manuscript (in USDA Library), pp. 6-14, 30-38, 47-63.

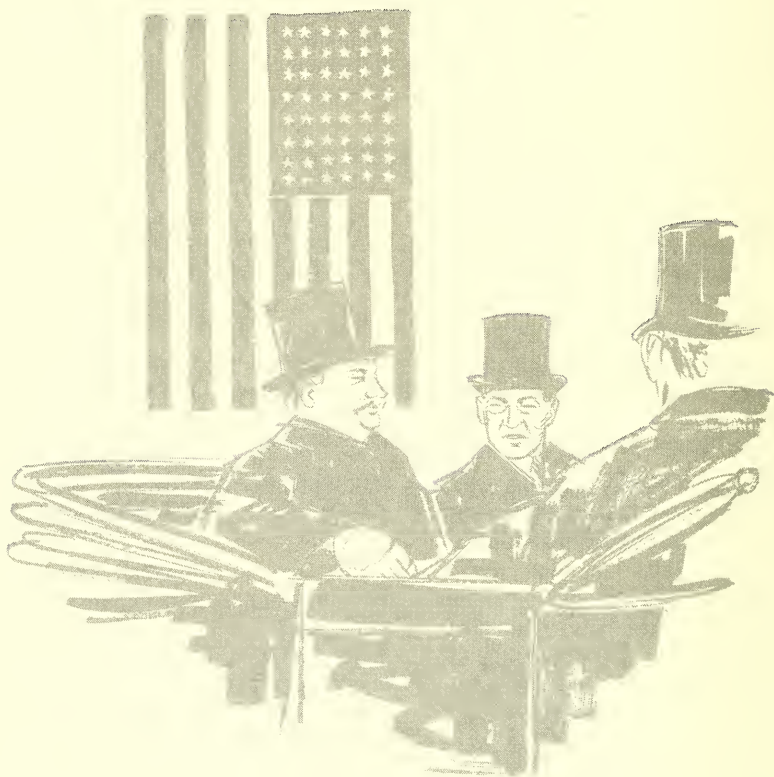
²⁹ 39 Stat. 482.

³⁰ U.S. Agricultural Marketing Service, Standards for United States Cotton, address by E. J. Overby before the 6th National Conference on Standards, Oct. 26, 1955.

³¹ 36 Stat. 440; 37 Stat. 295.

³² James Wilson to Senator Henry E. Burnham, Aug. 2, 1912, Bureau of Markets Correspondence, National Archives; Wilcox in *Tama Jim* says that such a plan was sent to McCabe, the Solicitor, but no copy has been found.

³³ 37 Stat. 854.



*A gala inaugural parade
on March 4, 1913, was
led by Wilson and Taft.*

The Department and World War I

The city of Washington prepared for a gala inauguration on March 4, 1913. Between 250,000 and 300,000 visitors crowded into the city to honor Woodrow Wilson, the first Democratic President in 20 years. Capitalizing on the occasion, leaders of the woman suffrage movement sponsored a parade on March 3, but this was disrupted by uncontrolled mobs. Great concern was expressed for protecting the inaugural parade, but all was in order. Special lighting was installed on Pennsylvania Avenue, and the crowd thronged the avenue long after the end of the parade.

David F. Houston arrived in the city among the host of visitors, unrecognized as the future Secretary of Agriculture. On March 2, some Democratic leaders in Congress were reported in the Washington *Evening Star* as believing that Henry Jackson Waters, president of Kansas State College, was foremost among the candidates for Secretary of Agriculture. Others mentioned were Charles Dabney, a former Assistant Secretary of Agriculture, and Obadiah Gardner of Minnesota. Even on March 3, an *Evening Star* reporter listed Walter Hines Page, editor of *World's Work*, as a possibility and speculated that as an alternative a dark horse from the West might be designated. On March 4, Houston, who had been selected in February, rode in the inaugural parade as the incoming Secretary of Agriculture.

Houston, who was to face the difficult problems of the war period, came to the job with teaching experience and supervisory administrative duties in colleges and universities. After completing his undergraduate work at the University of South Carolina, he took graduate courses in government, economics, and history at Harvard. In addition to teaching economics and government, he served as dean of the faculty at the University of Texas. He became president of Texas Agricultural and Mechanical College in 1902, and the University of Texas in 1905. In 1908, he moved on to the chancellorship of Washington University in St. Louis. In each position, he surveyed the situation, determined where work

should be strengthened, and reorganized it, bringing in the necessary new blood to make his plan effective.¹ As Secretary of Agriculture he conferred with his former associates in the land-grant colleges, appointing some of them to policymaking positions. Moreover, as the occasion demanded, he consulted with representatives of the Association of Agricultural Colleges and Experiment Stations. The first of such conferences was called on April 15, 1913, to discuss the maintenance of good working relationships with the States (306, no. 13). These proved of great help in bringing together suggestions and ideas for the work of the Department from 1913 to 1920.

The administration of the Department by Secretary Houston parallels the administration of the executive branch by President Wilson. Until 1917, President Wilson emphasized domestic reform. During this same period in the Department, Houston emphasized administrative policy, economic research, regulatory activities, and the expansion of extension work.

The second period under Wilson's leadership came into full being on April 6, 1917, with our declaration of the existence of a state of war with Germany. International conditions were in an explosive state when Wilson came into office. The explosion occurred on July 28, 1914, when Austria-Hungary declared war on Serbia. As the war spread, agriculture, as well as the actions of both President Wilson and Secretary Houston, was affected. However, it was not until we became completely involved that reform gave way to winning the war.

Reorganization of the Department

When Houston surveyed his Department in 1913, he found a number of relatively autonomous bureaus with diverse functions in each. He believed that the Department, as a whole, needed to be reoriented. He saw it as an agency of functions rather than organizational units and wanted to reorganize it with this idea in mind. Realizing that such major changes would take several years, Houston turned his attention to changes he considered of immediate importance for efficient operation (304, 1913, pp. 18-19; 86, pp. 33-35).

In planning the organization of the Department in 1913, Houston consulted at length with Walter Hines Page, who had advised Wilson on agriculture before and after the election, Wallace Buttrick and F. T. Gates of the General Education Board, Thomas N. Carver, professor of economics at Harvard University, and representatives of the land-grant colleges. He was fortunate in his selection of Beverly T. Galloway as his first Assistant Secretary to aid him in the details of planning and administration. Galloway

had served as a scientist in the Department since 1887, and as Chief of the Bureau of Plant Industry from its establishment in 1901 until his appointment as Assistant Secretary. His scientific background and firsthand knowledge of the functioning of the Department qualified him as a valuable aide.

In the late spring of 1913, plans were being prepared to revise the departmental organization. By the fall of 1913, a plan had been drawn up organizing the Department by functions, under services rather than bureaus: Rural Organization Service, Research Service, States Relations Service, Weather Service, Forest Service, and finally, a Regulatory Service.² Detailed plans were drawn up for the various services. The proposal was discussed at the annual meeting of the Association of American Agricultural Colleges and Experiment Stations. A request for authorization to formally reorganize the Department was made in the estimates for appropriations for the next fiscal year. The proposals were discussed in detail at the appropriation hearings in January 1914 (*277, 1915, pp. 608-609*). The basic reasons given for the Department-wide reorganization were the lack of power to coordinate work, inelasticity under the existing system, and the incompatibility of regulatory and research work.

At first, the Committee on Projects, which had been established January 31, 1914, was consulted by the Secretary on the reorganization of the Department. Milton Whitney, Chief of the Bureau of Soils, promptly opposed the idea of creating the "Services" and recommended instead the appointment of four Assistant Secretaries to direct the work on functional lines.³ By May 11, 1914, the rest of the committee favored retaining the bureau organization.⁴

The Appropriation Act for the fiscal year 1915 authorized and directed the Secretary to prepare and submit to Congress a plan for reorganizing, redirecting, and systematizing the work of the Department as the interests of efficient and economical administration required. On July 1, 1914, the Secretary appointed Walter Swingle, of the Bureau of Plant Industry, as chairman of the committee to draw up the plan for reorganizing the Department. Other members designated were F. G. Caffey, Solicitor; C. L. Alsberg, Bureau of Chemistry; J. R. Mohler, Bureau of Animal Industry; and C. L. Marlatt, Bureau of Entomology. The attention of the committee was called to the need for the segregation of research and regulatory work to attain greater flexibility of operation than was existent under the bureau system, and for simplification of business methods.⁵ The committee discussed the need for the separation of the research and regulatory work. On the one hand, it was proposed to segregate all of the regulatory work under a Director of Regulatory Work. The more conservative proposal was for the separation of the work within the organizational structure of the bureaus with the provision for supervision by an assistant or associate chief of the bureau.

When the committee made its report, it was evident that it pro-

posed a more conservative plan of reorganization than Secretary Houston had originally envisioned, but it nevertheless was submitted to Congress in the "Book of Estimates of Appropriations" for 1916 (40, pp. 5-6). The Secretary directed the chiefs of the various bureaus, when possible, to separate the research from the regulatory work within the bureaus. On March 10, 1915, definite plans were announced in the Department for the official redesignation of the Office of Markets as the Office of Markets and Rural Organization, and the Office of Public Roads as the Office of Public Roads and Rural Engineering; the establishment of the States Relations Service; and other lesser shifts of functions (306, no. 121). On April 1, 1915, the persons who were to direct the work after July 1, 1915, were instructed to take over the supervision immediately (306, no. 129).

On July 1, 1915, the reorganization officially went into effect under authorization of the Appropriation Act.⁶ The Office of Markets and Rural Organization was enlarged by the transfer of the market milk investigations from the Bureau of Animal Industry, the farm credit and insurance work from the Office of Farm Management, and the cotton standardization project from the Bureau of Plant Industry. The new Office of Public Roads and Rural Engineering was strengthened by the transfer of the farm architectural work from the Office of Farm Management and the irrigation and drainage functions from the Office of Experiment Stations.

The farm home management and farm demonstration work of the Bureau of Plant Industry, including that in the Office of Farm Management, was transferred to the States Relations Service. That part of the poisonous plant investigations relating to effects on animals was transferred from the Bureau of Plant Industry to the Bureau of Animal Industry. Soil fertility investigations were transferred from the Bureau of Soils to the Bureau of Plant Industry. The investigations of dryland plants and weed eradication, which had been conducted by the Office of Farm Management, remained in the Bureau of Plant Industry when the Office was transferred to the Office of the Secretary.

The Secretary's Office and Centralization of Administration

In the 7 years that David Houston was Secretary of Agriculture, the Department became more conscious of the Office of the Secretary. Accustomed previously to dealing directly with the Secretary, agency heads found that his assistants handled more and more questions. Some coordinating and other activities,

which previously would have been handled in the bureaus, were carried on by committees. Moreover, some administrative duties and authority which, in practice, had been decentralized in the bureaus were to be brought together in the Office of the Secretary. Thus the final authority in policy matters more noticeably was exercised in the Office of the Secretary, while his assistants were given responsibility for directing many of the Department's operations.

Houston was aided by a regular Assistant Secretary and by two additional ones under the Food Production Act of 1917. Beverly T. Galloway served in the regular position from March 17, 1913, until July 31, 1914, when he became dean of the New York State College of Agriculture. He was succeeded by Carl Vrooman who served from August 17, 1914, until December 31, 1918. On July 1, 1919, Clarence Ousley was appointed to this position from that of a Special Assistant Secretary, remaining only until the end of the month. He was followed by James R. Riggs of Indiana who served from September 22, 1919, until March 31, 1920.

The Assistant Secretaries, appointed under authority of the Food Production Act of August 10, 1917, were assigned special duties. Clarence Ousley, who served in this capacity from August 21, 1917, to July 1, 1919, was given responsibility for directing publication and informational activities of the Department. He had been appointed on June 25, 1917, as a special assistant to the Secretary in charge of this work. Raymond A. Pearson, the other Special Assistant Secretary, served from August 22, 1917, until August 22, 1918. He was assigned responsibility for keeping in touch with the State committees of food production and conservation and for representing the Department in its relations with the United States Food Administration. He was succeeded by George I. Christie who served from October 14, 1918, until June 30, 1919.

Special assistants to the Secretary were appointed to handle other aspects of the wartime work of the Department. On April 15, 1918, George I. Christie was appointed as special assistant in charge of the work on farm labor which had been assigned to the Office of Farm Management shortly after the United States entered the war (*306, no. 232; 277, 1919, p. 45*). On April 29, 1918, Junius Cook was appointed to act as a representative of the Secretary in dealing with problems arising in connection with the supply of farm machinery and equipment (*306, no. 236*).

With the rapid expansion of the Department, Secretary Houston found it necessary to cut down the number of people reporting to him. As a first step, he assigned the following duties to the Assistant Secretary: Acting as Secretary in his absence; supervision of scientific, regulatory, and practical work of the Department; supervision of information and publications activities; direction of miscellaneous, clerical, and other minor personnel changes; and

"generally to relieve the Secretary's Office of the details connected with Departmental affairs, to the end of giving the Secretary time for full consideration of larger questions and general policies" (306, no. 3). Shortly thereafter, on May 8, 1913, a further step was taken when the bureau chiefs were directed to formulate a concise statement on the progress of their work for the Secretary or the Assistant Secretary.

Secretary Houston made greater use than his predecessors of formal and informal committees in planning and carrying out the activities of the Department.⁷ They were used to draw up plans to reorganize work, to plan for or administer new projects authorized by legislation, or to meet needs in subject matter fields. However, announcements of policy decisions were made by the Secretary.

The period was one in which emphasis was given to the centralization of activities in the Office of the Secretary and the development of staff agencies. The early years were filled with plans and steps in this direction. In effect, these increased the importance of the position of the Assistant Secretary by the delegation of additional authority to him. In some cases, this was to facilitate uniformity of policy. On April 19, 1913, the Secretary asked that all requests for the establishment of experiment stations, testing farms, or the like within States, be handled by the Office of the Secretary, through the Assistant Secretary (306, no. 15). Then on July 10, 1913, the Secretary directed that all correspondence relating to exhibits, fairs, and the like, be referred to F. Lamson-Scribner, Special Agent on Exhibits in the Office of the Secretary (306, no. 35). Similarly on January 8, 1914, instructions were issued that all requests for information on items in the appropriation bills be referred to the Secretary's Office for action (306, no. 59). To insure consistency in the broader aspects, on January 17, 1914, a committee was appointed to conduct all business of the Department with the International Institute of Agriculture (306, no. 61).

In other instances, new procedures were instituted to prevent possible duplication of effort and to promote efficiency, cooperation, and unity of purpose. On May 6, 1913, all bureaus, divisions, and offices were directed to have all new projects or lines of work approved by the Assistant Secretary before work was begun (306, no. 18). Later, on January 31, 1914, a Departmental Advisory Committee on Projects was established to review projects and to advise the Secretary on needed correlation and adjustments (306, no. 68). During the war period the committee ceased to function, and, for a while, new projects were referred to the members for their separate approval. Later, the Secretary himself approved new projects.⁸

Some of the changes made were actually inaugurating, on a departmentwide basis, policies applied by Galloway, the Assistant Secretary, when he was Chief of the Bureau of Plant Industry.

On April 28, 1913, Galloway appointed a committee to report on a uniform system of personnel efficiency records, suggesting that it study the one in effect in the Bureau of Plant Industry for the 7 previous years.⁹ On June 15, 1913, the chiefs of scientific bureaus, offices, and boards were directed to appoint committees on the promotion of scientific personnel, which were to review their qualifications and make recommendations for promotion (*306, nos. 22, 36*). Efficiency registers, based on semiannual reports, were established in each bureau for use in the selection of nonscientific personnel for promotion (*306, no. 29*). Beginning July 1, 1914, all recommendations for appointment were to be sent to the Secretary's Office for its consideration and then to the Appointment Clerk for action.

Other changes were made which facilitated more efficient accounting in the Department. On November 1, 1913, an Advisory Committee on Finance was appointed to advise the Secretary on improving methods of handling the Department's fiscal affairs (*306, no. 50*). Shortly thereafter, on January 1, 1914, the responsibility for auditing all transportation and communications accounts was transferred to the individual bureaus and divisions (*306, no. 56*). A further step in this direction was the establishment, on May 1, 1914, of the Office of Inspection within the Office of the Secretary and under the immediate supervision of the Assistant Secretary. This Office was to assist the Secretary in more efficiently directing and supervising the expenditure of departmental funds and in superintending the conduct of its officers and clerks (*306, no. 86*).

The Office of Farm Management

When the Office of Farm Management was transferred from the Bureau of Plant Industry to the Office of the Secretary as part of the reorganization effective July 1, 1915, the transfer involved the separation of the work in farm management from the general economic and scientific work formerly conducted by the Office. Investigations of the utilization of dryland plants and methods for eradicating weeds remained in the Bureau of Plant Industry. Farm architectural work was transferred to the new Office of Public Roads and Rural Engineering. Farm demonstration and farm home management work were transferred to the newly established States Relations Service. Studies of farm credit and agricultural insurance were transferred to the Office of Markets and Rural Organization.

After careful planning, on July 1, 1919, the work of the Office of Farm Management was reorganized, new work added, and economic work transferred, making the redesignated Office of Farm Management and Farm Economics the general economic organization for the Department. Work in agricultural insurance, credit, and

rural sociology was transferred from the Bureau of Markets. The Office became independent of the Office of the Secretary a year later and in 1922 was merged with the Bureau of Markets and Crop Estimates, to form the Bureau of Agricultural Economics.

Organization and Expansion of Information Work

During Secretary Houston's term of office, beginnings were made in centralizing informational work of the Department in the Office of the Secretary. Because photographic and other visual aids available were not fully utilized, on October 28, 1914, a central index to such material available in the bureaus was set up in the Division of Publications (306, no. 108). The next step was the transfer, on August 18, 1915, of all editorial work from the Division to the Secretary's Office in the hope that bureau personnel would more readily accept editing by representatives of the Office of the Secretary (306, no. 145; 277, 1919, p. 295). The next step, a war measure in 1917, was the consolidation of all information and publications work under Assistant Secretary Ousley (306, no. 221).

Houston basically felt that the Department had not been doing an adequate job of selling itself. Much information never reached the people who could use it, or was written in too technical or formal language for the general reader.¹⁰ Moreover, there was a wealth of unused information for which there had been no plan for publication. As a first step, Galloway's duties as Assistant Secretary were spelled out in Secretary's Memorandum 3, March 28, 1913, to include the consideration of material for publication. A conference of bureau chiefs was announced for April 3, at which Galloway was to present a plan for publicity work (306, no. 4). Houston also called in his friend, Walter Hines Page, to meet on April 30, 1913, with chiefs of bureaus, offices, and independent divisions to discuss the subject in general. Houston based his program, in part, on the advice given by Page.¹¹ On April 19, 1913, Galloway appointed a committee composed of Logan W. Page, Joseph H. Arnold, and Harold F. Kellerman to consider the improvement of the departmental publications and publicity work (306, no. 7). The recommendations of this committee included greater centralization of the technical phases of the editorial work and closer consultation by representatives of the Division of Publications with the authors; the utilization of the agricultural press to take useful information to the farmer; the release of advance notices of bulletins and other information to the press by the Division of Publications; and the advice that the bulletins of the Department be limited to technical scientific material, while the circulars and farmers' bulletins should contain more popular information.¹² Just prior to this, Houston approved a recommendation of Galloway that employees of the

Department be permitted to offer scientific and technical material for publication in media outside the Department (306, no. 16).

Although the committee considered working through the existing Division of Publications, a new organization, the Office of Information, was established, June 7, 1913. The new office was limited primarily to acting as a press service for the Department. It was "to secure the widest possible circulation for the discoveries and recommendations of the scientists, specialists, and field workers in the Department of Agriculture." The facts given out were from printed bulletins or circulars, official reports, or oral statements of specialists. The matter so prepared and disseminated was designed to give accurate and popular statements of the work of the Department in a form that would attract the attention of readers and lead them to adopt the methods recommended (308, p. 28). By June 14, 1913, the new Office of Information began a centralized system of press releases, replacing the hit-and-miss system of the several bureaus. At a meeting of bureau chiefs on June 17, 1913, the subject of publications was further discussed.¹³

The plan for the separation of scientific from popular publications and the simplification, by consolidation, of series was announced by Secretary's Memorandum 34, dated July 1, 1913. Departmental publications were classified in four groups: Departmental bulletins; serial publications, including the new *Journal of Agricultural Research*, for strictly scientific papers; farmers' bulletins; and annual reports, yearbooks, and other congressional publications.

To supplement other informational aids, the Office of Information began supplying a series of articles to two of the news syndicates, which in turn supplied rural newspapers with material in plate form. A Secretary's memorandum of July 22, 1913, directed that the material was to be practical and briefly written and was to be released weekly. Beginning the first week in August 1913, a weekly newsletter was inaugurated, in accordance with undated Secretary's Memorandum 37. Its aim was to provide an interesting and effective weekly summary of the most important practical discoveries and recommendations of all the bureaus and offices. In Secretary's Memorandum 120, December 17, 1915, a monthly departmental edition of the newsletter was proposed.

On October 21, 1913, C. L. Alsberg of the Bureau of Animal Industry, realizing the inadequacy of the information on the Department's regulatory activities, suggested that a series similar to the "Treasury Decisions" be inaugurated.¹⁴ On October 27, 1913, Assistant Secretary Galloway appointed a committee to study the feasibility of an issuance to include informal decisions, extracts of correspondence, and other material of a general nature.¹⁵ Instead of instituting the type of issuance recommended by Alsberg, Secretary's Memorandum 57, December 26, 1913, provided for the release of service and regulatory announcements, on a monthly or

less frequent basis, by those bureaus and boards having regulatory functions.

The use of motion pictures was expanded during Houston's administration. As a first step, Houston appointed a committee to investigate the

. . . usefulness of moving pictures in demonstration and extension work, and to investigate the possibilities of developing for the use of field workers such pictures as will be both entertaining and instructive (306, no. 41).

The committee decided to study the whole field of motion pictures. In its report it approved the use of motion pictures and recommended that the Section of Illustrations of the Division of Publications be equipped to take and develop such pictures. Galloway instructed all bureaus and offices to submit proposals for motion pictures to the motion picture committee which would forward them to him for approval. Thereafter, the facilities of the motion picture laboratory would be made available (306, no. 55). However, it was still on an experimental basis and the bureaus were asked not to purchase equipment until a definite policy had been determined (306, no. 85). On June 26, 1913, instructions were issued to insure a permanent departmental collection of as much positive film as the funds of the producing bureau would permit (306, no. 95). By 1917, motion pictures had shown sufficient worth that the Secretary announced that the committee would proceed immediately to formulate definite plans for the development of the motion picture work and present him at the "earliest possible moment, a draft of proposed rules and regulations governing the sale, rental, or loan of films . . ." (306, no. 194).

Beginning in 1915, practically all editorial activity in the Department was done under the immediate direction of the Office of the Secretary. A Special Assistant Secretary, Clarence Ousley, was placed in charge of all publication and information activities, during the war (277, 1919, p. 215). By September 11, 1917, Ousley recommended that the consolidation be continued after the war on a regular basis.¹⁶ A step in this direction was taken by the Secretary in a memorandum of July 15, 1918, directing the Chief of the Division of Publications to act as the immediate assistant to Ousley in the administration of publication and motion picture activities in the Department. On July 31, 1919, the day that Ousley left the Department, he submitted his recommendations for bringing together in one organization the Department's publication, information, exhibit, motion picture, and library activities. He suggested that it be called the Office of Information, adopting the title of the existing smaller agency, and that the Chief of the Division of Publications be placed in charge. A committee was appointed to study his plan and submit its report.¹⁷ On September 2, 1919, Secretary Houston, in Memorandum 292, directed that all of the activities included in Ousley's suggestion, with the exception of the library, be placed under the administra-

tive supervision of the Chief of the Division of Publications. Although Ousley's plan was not fully put into effect at this time, the idea continued. Later that year, when the hearings were held on the appropriation for the next year, Floyd Harrison, Assistant to the Secretary, testified that future plans included the transfer of the work out of the Office of the Secretary and its official assignment to the Chief of the Division of Publications (277, 1921, p. 801).

Rural Organization Service

The keynote of the Country Life Commission of 1908 had been the improvement of farm life. This theme ran as an undercurrent in the plans for a reorganized Department of Agriculture. Soon after Houston became Secretary, he was approached by representatives of the General Education Board with an offer of financial aid for studies in rural life. This was accepted. Houston and Assistant Secretary Galloway consulted at length with Wallace Buttrick and Walter Hines Page, both members of the General Education Board, with T. N. Carver of Harvard, and with representatives of the land-grant colleges concerning departmental work as well as its relation to the land-grant colleges.

Page had been a member of the Country Life Commission and became an enthusiastic advocate for Government action in the field of rural life. In referring to a visit with President-elect Wilson soon after the election, Page wrote :

I went at my business without delay. The big country life idea, the great economic forces to put its vitalization within sight, the coming equilibrium by the restoration of country life . . . all coincident with his coming into the Presidency. His Administration must fall in with it, guide it, further it (102, p. 112).

He continued to advocate this work under the new administration. In a letter to "Uncle Henry" Wallace on March 11, 1913, he wrote "I've 'put it up' to the new President and to the new Secretary to get on the job immediately of *organizing country life*. I've drawn up a scheme (a darned good one, too) which they have" (102, p. 117). Page made other suggestions on organization of the Department.

The establishment of the Rural Organization Service within the Department of Agriculture marked a radical departure from previous policy. Previously, the General Education Board had contributed funds for part of the demonstration work conducted by the Bureau of Plant Industry. In this case, however, the plan was to institute a new line of work under the jurisdiction of the Department but financed by the Board rather than by Federal funds. Houston, a member of the General Education Board, cooperated closely with Walter Hines Page and Wallace Buttrick in setting up

the project. He considered it as possibly the "beginning of most significant things for the rural life of the nation."¹⁸ In further discussing the subject with Samuel P. Abelow, Houston wrote:

The emphasis, in the past, has been largely upon improving production; now the time has come to give attention to rural organization. . . . With the cooperation of the General Education Board and under the leadership of Professor T. N. Carver of Harvard University, the Department is establishing the Rural Organization Service for the study of rural economic problems in a broad way We shall study existing organizations and value them; and then try to bring into active cooperation all that will be helpful in advancing rural life.¹⁹

As conceived, the Rural Organization Service was to include both the new activity in rural life and the expanded investigations of marketing of agricultural commodities. At first, discussions on plans concerned both marketing and rural organization. Soon the marketing work was organized in the Office of Markets, as a unit of the Service. General supervision was placed under Thomas N. Carver, a professor of economics at Harvard, who served as a collaborator in the Department. With the exception of those employed on marketing studies, the investigators, economists, and clerks of the Rural Organization Service were appointed as collaborators during the first year and paid by funds disbursed by the General Education Board (*271, Apr. 14, 1914*). Although Carver was in charge of the entire Service, Charles J. Brand, Chief of the Office of Markets, reported directly to the Secretary.

When Carver had been in the Department for a while and had had a chance to survey the field, he drew up for the Secretary's approval a greatly expanded plan of work for the next year. This proposal was rejected by the General Education Board, and on December 31, 1913, the Department and the Board decided to terminate the agreement on June 30, 1914 (*271, Apr. 14, 1914*). Funds for conducting some of the studies were included in the appropriation act for the fiscal year beginning July 1, 1914. These studies were placed under the direction of C. W. Thompson, who had previously assisted Carver.²⁰ On July 1, 1915, the two units were combined in the Office of Markets and Rural Organization.²¹

Organization of Marketing Work

While the Secretary was engaged in plans for the overall Rural Organization Service, his Assistant Secretary, Beverly T. Galloway, was zealously working on the organization of the expanded and redirected marketing activity authorized by an act of March 4, 1913.²² Under the act, \$50,000 was appropriated, \$10,000 to become available immediately. Supported by the Secretary, who believed

that "better production in all lines awaits better distribution, and without better distribution, better production is not desirable," he took preliminary steps. On March 20, 1913, he wrote to the Chiefs of the Bureaus of Animal Industry, Plant Industry, Chemistry, and Statistics suggesting that they name representatives to formulate a marketing project, with W. J. Spillman as chairman of the committee (372, *Dec. 26, 1913*). A number of economists were called in to discuss the work and on March 27, 1913, a conference was held at which previous studies of the Department on the marketing of poultry and eggs, fruit, dairy products, grain, and cotton were discussed.²³

Meanwhile, there was a parallel movement outside the Department. The Association of Agricultural Papers sponsored a conference in Chicago, April 8-10, 1913, to discuss ways and means by which the farmer might more efficiently market his produce. Delegates from the Central and Western States heard addresses by farmers, members of the staffs of agricultural colleges, railroad representatives, and members of farm organizations. W. J. Spillman was sent to represent the Federal Department of Agriculture. Resolutions were adopted and sent to President Wilson recommending the establishment of a separate marketing agency in the Department and Federal supervision of cooperative credit and long-term land mortgage associations (372, *Apr. 18, 1913*). Following this meeting, another was held in Washington on April 29, 1913, under the direction of the Secretary of Agriculture. Economists discussed the problems involved in establishment of a market news service, considered by many to be the core of the work of the new marketing unit (323).

Although it had been proposed to organize the marketing work as a division of either the Bureau of Statistics or the Bureau of Plant Industry, Houston preferred a unit responsible to his office. The Office of Markets was set up on May 16, 1913, within the new Rural Organization Service.²⁴ Charles J. Brand was appointed the first Chief of the Office and remained in charge until June 30, 1919. The work was divided into projects, following the system used by the Bureau of Plant Industry.

In order to obtain the fullest cooperation, Carver suggested the advisability of a new approach, conferring with representatives of the leading farm organizations. Admitting that such a meeting might be "strenuous and obstreperous," he was willing to hold a conference to discuss plans for agricultural credit and the Office of Markets. However, Houston did not think that it was the proper time for such a gathering.²⁵

During the first year of its operation, work in the Office of Markets centered around preparatory studies of market grades and standards, cooperative marketing and distribution, supply and demand, organization of consumers, methods and costs of distribution, transportation and storage problems, and the feasibility of a market news service for perishable products.²⁶ However, the Sec-

retary was not in favor of any organization "for a closed market, for instance, to fix prices." To him this was as unthinkable in the field of agriculture as in any other (304, 1913, p. 22; 14, 1913, p. 22).

Economic work in the Office of Markets and its successors expanded rapidly during the tenure of Secretary Houston along three main lines: research, service, and regulatory. This necessitated close cooperation of the Office with the scientific agencies. Then when the United States entered the war, it involved increased cooperation with other governmental agencies (202).

Economic research was the core of early activity in the Office of Markets. The research was to prove useful later when service and regulatory work was undertaken (230, pp. 233-234). Preliminary studies of markets, their methods and costs, were undertaken in 1913 and 1914 to provide data for the institution of a market news service. Surveys of cooperative marketing associations and accounting systems, begun in October 1913, provided information useful later in assisting producers to organize cooperatives.

On December 1, 1913, research on problems relating to the transportation and storage of farm products was undertaken. The findings of this study and of the one on cotton warehouses that had commenced late in 1914 were available to the Office when it was assigned the administration of the Warehouse Act, passed in 1916. One of the other studies undertaken by the Office of Markets, on September 25, 1913, was of marketing by parcel post—parcel post had been established January 1 of that year. A somewhat parallel study of advantages of and problems involved in motor transportation of farm products was begun on March 15, 1918. A broader study of city marketing and distribution was among the early studies undertaken in 1913. Among the more specific studies was one on grain marketing at points of production and terminal markets, begun in 1915. By 1916, studies had been made of future trading in grain. The Bureau of Markets cooperated with the United States Food Administration and the Federal Trade Commission in conducting surveys (277, 1917, p. 481; 150, pp. 147-165).

While early studies of marketing related to domestic aspects, in 1915 attention was also given to foreign marketing. In June 1916, a representative was sent to Europe to study market conditions and the demand for American products. In 1917, a special investigator began a study of the possibility of marketing American fruit in China, eastern Siberia, Japan, and the Philippines. In 1918, an investigator was sent to study the marketing of fruit, meat, livestock, dairy products, and wool in Australia, New Zealand, and nearby islands (150, pp. 159-160).

In August 1918, the Secretary appointed the Agricultural Commission to Europe to study agricultural conditions and the outlook for the postwar reconstruction period. It was composed of eight

men, four from the Department of Agriculture, three from agricultural colleges, and one farmer, a specialist in plant breeding. The group sailed on August 24, 1918, and returned the following November 5. Their findings were of help in framing agricultural policies for the United States during postwar reconstruction (150, pp. 207-208; 319).

During the postwar period work was continued in the field of foreign marketing. In May 1919, an agricultural trade commissioner was sent to London to report on foreign trade, and soon after, one was sent to Buenos Aires. In 1919 and 1920, special representatives were sent to develop a market for purebred livestock in South America (155).

Although much of the emphasis in economic research was given to marketing, some studies were carried on concerning other facets of the general field. Social and economic surveys, begun by the Rural Organization Service, were continued when that agency was combined with the Office of Markets. Studies in agricultural history and geography were expanded. In 1915, the "Graphic Summary of American Agriculture" was published in the *Yearbook of Agriculture*.

The economic service activities represented a greater departure than economic research from previous functions carried on by the Department. By many, the institution of a market news service was considered one of the prime duties of a departmental marketing agency. But, about 2 years passed, following the establishment of the Office of Markets, before a market news service was instituted. It was started on an experimental basis for fruits and vegetables. An advisory service was provided for cities desiring to improve their marketing and distributing facilities. During the 1916 fiscal year, assistance was given in the establishment of a federation of individual fruit shippers and fruit shipping associations of Washington, Oregon, Idaho, and Montana. Assistance was also given in the application of business methods by marketing agencies and facilities. The Agricultural Appropriation Act, approved August 11, 1916, authorized cooperation with States to assist them in acquiring and diffusing information on marketing farm products.

Under the Food Control Act of 1917, the Department was authorized to distribute fertilizer at cost to producers. The Bureau of Markets was assigned the administration of the program. The Bureau also cooperated with the War Industries Board in its campaign in 1918 for better distribution and utilization of cotton. Work of the War Industries Board on the collection and distribution of excess profits of the wool industry was transferred to the Department of Agriculture by Executive Order 3019A, on December 31, 1918, and was assigned to the Bureau of Markets.

During its first year, the Office of Markets devoted its attention to marketing studies, but with the approval of the Cotton Futures Act on August 18, 1914, its activities were expanded into the regu-

lation of marketing. To this were added the Warehouse Act, the Grain Standards Act, and the Standard Container Act in 1916.²⁷ For the administration of this legislation, a nationwide organization was built.

Initially passed on August 18, 1914, and reenacted as part of the Appropriation Act on August 11, 1916, the Cotton Futures Act prescribed rules and regulations under which the sale of cotton for future delivery was to be conducted by any exchange, board of trade, or similar organization. Official standards of the Department were to be used in such trading. On December 15, 1914, the Secretary established and promulgated official standards for nine grades of cotton. Their use, under the act, was practically compulsory after February 18, 1915. The Secretary issued rules and regulations relative to the hearing of disputes, on February 11, 1915, effective immediately. In 1915 investigations of futures exchanges and spot markets were made to determine which ones should be designated as "bona fide" markets under the provisions of the act (245, p. 11). Official standards for American Egyptian and Sea Island cottons, and for length of staple, were established and made effective October 25, 1918.

The Grain Standards Act, approved August 11, 1916, authorized the Secretary of Agriculture to establish standards of quality and condition of grain.²⁸ The grades so established were to be used by federally licensed grain inspectors in inspecting grain for interstate or foreign shipment. Federal standards for shelled corn, announced September 1, 1916, became effective December 1, 1916. Federal standards for wheat were issued March 31, 1917. Those for winter wheat were to be effective July 1, 1917, and for spring wheat, August 1, 1917. On June 16, 1919, official United States standards for oats became effective (277, 1919, pp. 403-433).

The Department experienced some difficulty in administering the Grain Standards Act as differences of opinion developed between the personnel of the Bureau of Markets and the grain trade. In the main, these concerned the consideration of moisture in grading. The initial administration of the act came during World War I, when conditions were abnormal and prices were fixed. But enactment of the act facilitated operations of the United States Grain Corporation after its establishment by Executive order on August 14, 1917.

The United States Warehouse Act, the third regulatory act approved on August 11, 1916, provided for Federal licensing, on a permissive basis, of warehousemen storing agricultural products. Warehouses so licensed were required to provide for inspection and storage of goods offered. On acceptance of products for storage, a licensed warehouseman had to issue a receipt for each man's goods, which were to be stored separately, giving grade, quantity, and date. In grading, official standards were to be used if available and warehouses were subject to examination by the Department

of Agriculture.²⁹ Preliminary investigations were made and rules and regulations drawn up during 1917 and 1918, as preparatory steps to the administration of the Warehouse Act. Administration was delayed because of the greater need for the Bureau of Markets to work on grain standards, regulation of futures trading in cotton, and food inspection (277, 1919, p. 453).

The Standard Container Act, approved August 31, 1916, became effective on November 1, 1917.³⁰ It undertook to provide a standard of uniformity for containers of small fruit.

Some activities closely related to regulatory work in the Bureau of Markets and its predecessors were not directly authorized by legislation. In 1916, work was initiated to develop grade standards for livestock and meat. Tentative unpublished grades were used by the Department in reporting prices at the wholesale level. The standards so developed were used by the armed services in purchasing meat during World War I. Tentative standards for beef carcasses were first published in 1923 and after revision were promulgated by the Secretary of Agriculture in 1926 as the Official United States Standards for the Grades of Carcass Beef. These standards provided the basis for grading when the voluntary beef grading service was begun in 1927. In June 1918, the Secretary of Agriculture was authorized by Presidential proclamation to license stockyards. On September 6, 1918, authority was extended to include stockyard activities of slaughterers and renderers (391, pp. 41-46; 150, p. 165).

Much of the work of the Department financed by special appropriations was curtailed after the end of World War I. When the War Industries Board was dissolved, however, the function of its Domestic Wool Section, that of collecting and distributing excess profits in the wool industry, was transferred to the Bureau of Markets of the Department.

As the economic work of the Department had expanded rapidly during the Houston administration under the steadily mounting demand for more action by the Federal Government, administrative organization changed. From the initial idea of concentrating such activities in the Rural Organization Service, the plan was changed in 1915 to placing primary responsibility in the Office of Markets and Rural Organization. In 1919, a reappraisal of departmental activities by leading agricultural economists resulted in the recommendation that the economic activities be concentrated in a Bureau of Farm Management. The recommendation was adopted with the exception of elevation of the Office of Farm Management to bureau status.

When the Office of Markets was established on May 16, 1913, it was set up within the proposed, privately financed Rural Organization Service. When the Federal Government took over the support of the work of the Service on July 1, 1914, the Chief of the Office of Markets was assigned general supervision of this work. On July 1, 1915, the functions of the two agencies were combined

under the new designation of "Office of Markets and Rural Organization." Furthermore, its scope was expanded by the transfer of economic work from other bureaus. Farm credit and insurance studies were transferred from the Office of Farm Management. Investigations of milk marketing were transferred from the Dairy Division of the Bureau of Animal Industry. Cotton standardization, with the exception of certain technological investigations, was transferred from the Bureau of Plant Industry (306, no. 121). The addition of service and regulatory work was reflected by the redesignation of the agency on July 1, 1917, as the Bureau of Markets.³¹ On July 1, 1919, the Bureau lost to the reorganized Office of Farm Management and Farm Economics research on agricultural insurance, credit, and sociology.

Agricultural Estimating and Statistical Work

One of the old-line agencies to be reorganized soon after Houston became Secretary of Agriculture was the Bureau of Statistics. Dissatisfied with the functioning of the Bureau, Houston directed the Solicitor to make a study of it. On the basis of this, some changes in personnel were made, and a committee, consisting of representatives from several offices and bureaus, was appointed to conduct a further study. The outcome of this was that studies in marketing and distribution were discontinued, and the Bureau's functions were limited to forecasting, estimating, and statistical work, and consolidated in the Divisions of Crop Reports and Crop Records and the Crop Reporting Board (264, pp. 234-238). On July 1, 1914, the name was changed to the Bureau of Crop Estimates.³² When in 1914 the interbureau committee was drawing up its plan for the reorganization of the Department, Walter Swingle, its chairman, advocated that the Bureau of Crop Estimates be combined with the Office of Markets. But Brand, the Chief of the Office, objected at this time; the two agencies were not united until July 1, 1921.³³

States Relations Work

The Appropriation Act for the 1916 fiscal year authorized the establishment of the States Relations Service on July 1, 1915.³⁴ This included the Office of Experiment Stations, the Office of Exten-

sion Work in the South, the Office of Extension Work in the North and West, and the newly established Office of Home Economics (306, no. 140). The Service replaced the States Relations Committee which had been established by the Secretary on June 15, 1914, to coordinate functions of the Office of Experiment Stations and extension work as expanded by the Smith-Lever Act of May 8, 1914 (306, no. 92). The States Relations Service was established to act as the coordinating agency for relations between the Federal Department and the agricultural colleges and experiment stations.

During the decade preceding Houston's administration, forms of agricultural extension in which the land-grant colleges participated had increased so rapidly that agencies were experiencing difficulty in meeting demands for assistance. From 1909 until the passage of the Smith-Lever Act, May 8, 1914, several bills were introduced to increase Federal funds for this work. As the administrator of the funds, the Department conferred with the executive committee of the American Association of Agricultural Colleges and Experiment Stations to coordinate its planning with the legislation. By April 1913, plans were being drawn up for the merger of the demonstration work conducted by the Office of Farm Management with that conducted by the Farmers' Cooperative Demonstration Work. Shortly thereafter, the proposal included the designation, "Office of Extension Service" with a director, but this was not put into effect after the Appropriation Act was passed.³⁵

Extension

The Smith-Lever Act, approved May 8, 1914, provided for cooperative administration of extension work by the United States Department of Agriculture and the State agricultural colleges. Extension work was to—

. . . consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise³⁶

Extension work as expanded under the Smith-Lever Act was to be divided into two units, one for Southern States under Bradford Knapp, and one for the Northern and Western States under C. B. Smith. Under the act, agreements were entered into with the States and farm organizations, providing that all extension work of the Department be coordinated with the farm and home demonstration work.

A memorandum of understanding was prepared in 1914, by the States Relations Service, with the approval of the executive committee of the Association of American Agricultural Colleges and

Experiment Stations, to clarify the nature of cooperative relations between the Department and the State agricultural colleges in extension work. Copies were sent to the State colleges and accepted by all States except Arizona and California in 1914. The University of Arizona accepted later, but the University of Illinois withdrew.

The agreements provided that all extension work undertaken by the Department in the States should be carried on through the State colleges of agriculture. Agents appointed for cooperative extension work under Department funds were joint employees of the Department and the colleges. Agents employed under Smith-Lever funds did not need departmental approval. The Secretary of Agriculture agreed to establish an Office of Extension Work to represent him in the supervision of the work. The colleges, in turn, agreed to set up a separate extension division, with a leader satisfactory to the Secretary, to administer all State and Federal extension funds, and to cooperate with the Department in all extension work in agriculture and home economics which it should be authorized to conduct (*23, p. 38-39*).

The number of employees engaged in extension increased as its functions expanded with the availability of additional funds, including emergency appropriations. By 1915, there were 1,136 white county agents; by June 30, 1917, there were 1,400 white county agents and 66 Negro agents; and by October 1917, more than 1,600 emergency demonstration agents, including 600 women, had been appointed. By June 30, 1918, 2,435 counties had agricultural agents, 1,715 counties demonstration agents. The Department's efforts to increase production of agricultural commodities during World War I were carried into the States by extension personnel. They closely cooperated with the United States Food Administration in its program of food and feed conservation. Moreover, extension personnel assisted in the program to relieve the acute farm labor shortage. Through the expansion of the boys' and girls' club work, the children were brought into the program for maximum production and utilization of agricultural commodities. Extension agents also took an active part in the Liberty Loan and war savings campaigns as well as those of the Red Cross. In addition, the county agents were actively engaged in organizing local farm bureaus and other groups to sponsor or assist in carrying out the extension program (*23, pp. 41-45; 228, pp. 114-151; 134, pp. 54-55*).

Extension work under emergency funds was discontinued after the war ended and the problem of scarcity of goods was replaced by one of surpluses. Extension workers continued to foster farmers' organizations at the local and State levels. In 1919 and 1920, State farm bureau leaders met and organized the American Farm Bureau Federation, a nationwide organization coordinating State, county, and local groups supporting county extension personnel.

Nutrition

Nutrition was closely allied with the extension work. Begun in the Office of Experiment Stations in 1894, investigations on nutrition were expanded to include other phases of home economics. When plans for reorganizing the Department were being considered in 1913, Walter Swingle included in his recommendations the establishment of a Bureau of Nutrition.³⁷ The Smith-Lever Act of 1914 included a provision for instruction and demonstration work in home economics. It was given further status when on July 1, 1915, a separate Office of Home Economics was established in the new States Relations Service.³⁸

During World War I the work of the Office became closely associated with the war effort. It developed for the War Department a suitable emergency food ration. In cooperation with the Treasury Department, it prepared thrift leaflets. For the United States Food Administration, it prepared 24 food leaflets, a series of 10 lessons on food conservation, and other informational material. It also assisted in preparing a series of lessons for women's clubs, "The Day's Food in War and Peace" (277, 1921, p. 1017).

Office of Experiment Stations

When the States Relations Service was established in 1915, as a part of the reorganization of the Department, the functions of the Office of Experiment Stations became more limited in scope. Its nutrition investigations were transferred to the new Office of Home Economics, and the irrigation and drainage investigations to the new and expanded Office of Public Roads and Rural Engineering. Under the Smith-Hughes Vocational Education Act, approved on February 23, 1917, the Federal Board for Vocational Education was established, assigning to it responsibility for the administration and supervision of the new Federal educational program including that on agricultural instruction.³⁹ Thus, the Office of Experiment Stations was concerned primarily with direction of the State, insular, and territorial experiment stations. An additional station in the newly acquired Virgin Islands was authorized on October 1, 1918, by the appropriation act. On January 1, 1919, the station maintained by the Danish Government at St. Croix was transferred to the United States Department of Agriculture (230, p. 232).

Scientific Work

Scientific work was redirected somewhat like other functions had been, but to a lesser degree. Additional legislation was passed

increasing regulatory activities. Scientific bureaus found the war in Europe affecting the United States prior to its entry as a belligerent and sought to meet needs so occasioned. Measures were taken to insure maximum production through the most efficient use of resources and to prevent adverse conditions from diminishing the total production. In addition, much attention was given to assistance to war agencies, especially the War and the Navy Departments.

Many sources of medicinal plants ordinarily imported were cut off by the war. The Bureau of Plant Industry, in 1916, undertook to supply some of these by establishment of two large camphor plantations in Florida which would supply thymol, oil of lemon grass, sesame, and belladonna (277, 1917, pp. 383-397). On August 11, 1916, \$50,000 was appropriated for research in the development of dye materials. The results of this laid the basis for the United States vat dye industry (379, pp. 51-52).

Scientists were also called in to help solve problems in the grain industry. In 1914 the Bureau of Chemistry began studies of the physical and chemical properties of grain and cereal dust arising in the threshing, storing, handling, and milling processes to determine causes of explosions in threshers, mills, and elevators. The findings were to be used in the prevention of such explosions and fires (150, pp. 89-92).

The Bureau of Biological Survey, which had been engaged in experiments and demonstrations in predatory animal control, expanded its activities under its appropriation for 1914. This work, and that in rabies control and wild food conservation, contributed to increasing potential agricultural production (41, pp. 46-50).

The Forest Service contributed to the war effort especially through fire prevention studies and in furnishing expert advice and men to European allies on forest-related problems in cooperation with the War Department (150, pp. 24-39).

The Food Production Act passed August 10, 1917, appropriated \$885,000 for the control and eradication of diseases and pests of livestock; the enlargement of poultry production; and the conservation and utilization of meat, poultry, dairy, and other animal products.⁴⁰ The work of many agencies was redirected to fit into this pattern. Emphasis was placed on the continued control of plant and animal pests and diseases as a means of increasing output, the Bureaus of Plant Industry, Entomology, and Animal Industry being particularly concerned. In 1915, a campaign for the eradication of citrus canker, a bacterial disease of citrus fruits and trees, was undertaken by the Bureau of Plant Industry in cooperation with the Gulf States. In 1917, the Bureau conducted a cooperative program for the control of white pine blister rust after a preliminary survey showed a widespread area of infestation. During the war, the Bureau of Entomology received special funds for the control and eradication of insects (381, p. 50; 177, p. 25).

The European corn borer, the Japanese beetle, and the pink boll

worm were three of the insects that the Bureau helped to combat. The European corn borer supposedly entered the country about 1909 or 1910 and was discovered first in 1917 near Boston, Mass. In 1918, a study of it was begun by the Bureau of Entomology. The Japanese beetle was found in 1916, near Riverton, N.J., in a shipment of iris roots from Japan. The Bureau began active work on it in 1917, and in 1919 imposed a domestic quarantine financed by a special appropriation (381, pp. 34, 47). The pink boll worm was discovered in Texas in 1917 and the Department assisted in its control by pulling and burning plants, cotton, and seed (277, 1919, pp. 462-466).

Although much of the regulatory legislation during Houston's administration related to marketing, some was also passed relating to the work of the scientific bureaus, especially the Bureau of Animal Industry. On March 4, 1913, an act was approved providing for the control of importation, manufacture, and interstate sale of virus, serum, toxin, or analogous products for use in treating domestic animals. To meet the dangers of the increase of tuberculosis in animals, on March 4, 1917, an act was passed appropriating \$75,000 for the eradication of the disease, the first funds so provided.⁴¹

The Migratory Bird Treaty Act of July 3, 1918, had an entirely different motive from other regulatory legislation in that it gave legislative status to the regulatory features of the agreement between the United States and Great Britain, signed by President Wilson on December 8, 1916.⁴² This act was broader in its coverage than previous legislation had been (41, pp. 101-102).

In a period when efforts were exerted to reach maximum production, emergency conditions required immediate action. A drought in Texas beginning in 1916 continued through 1918 and one in Montana began in 1918 and lasted through 1919, when it included Wyoming and other parts of the Northwest. The Bureau of Animal Industry assisted in solving some of the problems in moving livestock from drought areas to other sections where feed was available. Thereby, the livestock industry was sustained and the supply of meat for consumption insured (111, pp. 251-252, 357).

While the primary attention of the scientific bureaus was given to war-related problems, other plant scientists continued their research. Out of this came valuable contributions. From 1916 to 1918, Donald F. Jones, at the Connecticut Experiment Station, was developing a system for growing modern hybrid seed corn. In 1917, Kansas Red (Kanred) wheat was distributed for commercial growing. H. F. Roberts of the Kansas Agricultural Experiment Station had developed it by single line selection. Its resistance to drought and cold and to stem rust in the seedling stage were to make it an important contribution to the great wheat States. Another variety, Ceres wheat, was developed by

L. R. Waldron, of the North Dakota Experiment Station. This was one of the most successful examples of wheat improvement by hybridization in the United States. The cross was made in 1918 and seed distributed for commercial growing in 1926. Its superior characteristics included resistance to stem rust and drought, high yields, and good quality. It was less subject to grasshopper damage than other varieties (51, pp. 219-224; 370, pp. 112-113).

The work of the Office of Public Roads and Rural Engineering, the successor of the Office of Public Roads, was expanded under the reorganization effective July 1, 1915. Preparatory steps were taken when Secretary Houston, on September 29, 1914, requested A. C. True to afford Logan Page, Chief of the Office of Public Roads, every facility to familiarize himself with the irrigation and drainage work to be transferred to his Office from the Office of Experiment Stations. On April 1, 1915, Page was instructed to supervise the farm architectural work of the Bureau of Plant Industry and the irrigation and drainage work of the Office of Experiment Stations (306, no. 129). On July 1, 1915, formal transfer was effective, and in 1916, the work was expanded by the appropriation of \$12,805 for investigating farm domestic water supply and drainage disposal, the construction of farm buildings, and other rural engineering problems involving mechanical aspects (108, p. 40). The passage of the Federal Highway Act of July 11, 1916, authorized aid for 5 years and directed the Secretary to cooperate with States in the construction of rural post roads.⁴³ Though curtailed somewhat by the advent of the war, some progress was made. The appropriation act for the fiscal year beginning July 1, 1918, authorized the redesignation of the Office as the Bureau of Public Roads.⁴⁴

The Federal Government and Agricultural Credit

One of the crucial problems facing the farmers in the prewar period, discussed by President Theodore Roosevelt's Country Life Commission, was the inadequacy of credit at reasonable rates. On March 18, 1912, President Taft instructed the embassies and legations to collect information on rural credit systems in Europe, and the data they collected were combined into a preliminary report and discussed later with State Governors (105, pp. 3-7).

In the spring of 1912, David Lubin of the International Institute of Agriculture conducted a conference on agricultural finance at the meeting of the Southern Commercial Congress in Nashville.

Among those attending was Walter Hines Page. The Congress authorized the appointment of the American Commission to visit Europe and study agricultural credit systems. The Commission, led by Senator Duncan Fletcher, was endorsed by the United States Senate on August 15, 1912. That year the major political parties included, in their platforms, planks recommending investigations of agricultural credit organizations in other countries (209).

A parallel group to the American Commission, the United States Commission, was provided for in the appropriation act approved March 4, 1913. Also led by Senator Fletcher, it consisted of seven members appointed by the President and cooperated closely with the American Commission in Europe. On their return to the United States, the two commissions made a joint report on their findings, and each prepared a separate report that included a proposal for rural credit legislation (15, 16, 268).

Meanwhile the Department had been conducting a study of rural credit. In January 1913, the Bureau of Statistics mailed questionnaires to country banks intended to determine the range in interest rates charged for short-term loans throughout the country. Its findings were published in the April 1913 *Crop Reporter*.

The passage of the Federal Reserve Act on December 23, 1913, lent force to the agricultural credit movement, not only by focusing public attention on banking and credit problems but also by providing the argument that the Federal Government had created a financial system for commerce and industry. Thus, it was argued, agriculture should receive like treatment (109, p. 7). But, Houston was opposed to the passage of rural credit legislation. He spoke publicly against it in an address before the annual session of the Grange when he said:

I am not impressed with the wisdom and the justice of proposals that would take the money of all the people through bonds or other devices and lend it to the farmers or any other class at a rate of interest lower than the economic conditions would normally require and at a rate of interest lower than that at which other classes are securing their capital (307, Nov. 26, 1913).

Numerous agricultural credit bills were introduced during the 64th Congress. Congressmen urged (1) direct loans by the Federal Government, (2) organization of land banks by lenders, or (3) cooperative associations of borrowers, securing loans from land banks. The Federal Farm Loan Act was finally passed and approved by the President on July 17, 1916.⁴⁵ This represented a compromise settlement in the battle for long-term agricultural credit by the establishment of cooperative national farm loan associations and joint-stock land banks. The act provided for a system of 12 district Federal land banks under the supervision of a Federal Farm Loan Board. The Board also had general supervision of a Federal Farm Loan Bureau established in the Treasury Department, the cooperative associations, and the joint-stock land banks.

Agriculture in World War I

From the beginning of 1917, the Department urged increased production of food for domestic consumption and export. It conducted special drives for increased output and the conservation of food supplies. In January 1917, appeals were sent to the South urging the production of a surplus of food products as well as cotton, the main money crop. In February, special emphasis was placed on raising sugarbeet seed on a large scale to meet the need formerly met by imports from Europe. In March, wheat producers in the West and Northwest, whose wheat had been winterkilled, were urged to plant some other food crop. Later in the month, a more general appeal was made urging farmers to adopt measures to achieve maximum production by careful seed selection, control of plant and animal diseases, and conserving farm products through careful storage, canning, drying, and preserving (304, 1917, pp. 6-10).

There was also a general concern outside the Department of Agriculture for adequate food production and distribution before war was declared by the United States. Groups were organized in a number of States to study the problem, make recommendations, and take possible action. On April 4, 1917, Secretary Houston wired W. O. Thompson:

Am being swamped with requests from press, State agricultural officials, officers of agricultural organizations, municipal bodies, and others for suggestions as to course of action for increased production and better distribution. Seems essential for effect on public sentiment and for formulating suggestions that some sort of conference be held. Think first conference should be largely official Wire immediately as to desirability meeting and date.⁴⁶

The same day, telegrams were sent to State commissioners of agriculture and presidents of land-grant colleges requesting their participation in a conference in St. Louis on April 9 and 10, 1917. On April 5, 1917, a special plea was made by the Department for farmers to increase their production of corn and hogs. Two days later, Houston appealed to producers to increase their output of staple as well as perishable commodities.

The meeting of the State commissioners of agriculture and representatives of the land-grant colleges in St. Louis on April 9 and 10, 1917, was the first of a series held to include representatives of the agricultural segment of the Nation. At the meeting in St. Louis, recommendations for necessary action to increase production and improve distribution were drawn up, and these were submitted to a similar conference held in Berkeley, Calif., on April 13, and presented to Congress on April 18, 1917. These proposals were later incorporated in the Food Production and Control Acts approved August 10, 1917.⁴⁷ Other meetings were held for editors of farm journals in St. Louis on April 11, 1917, and for representatives of

farm organizations and farm leaders in Washington on April 23, 1917 (*113, vol. 1, pp. 260-261; 309; 307, May 2, 1917*).

Shortly after war was declared, President Wilson cabled Herbert Hoover, Chairman of the Commission for Relief in Belgium, to come to Washington for a conference on United States food problems. Before he arrived in the United States, Hoover had drawn up a plan for an independent Federal agency to deal with these, and on May 19, 1917, he issued a statement of his cardinal principles of food administration. These included the centralization of activities under a "food administrator" administratively responsible to the President, and functioning through existing commercial distributive agencies; and the use of volunteers in the important positions as well as in the lesser ones (*112, vol. 3, pp. 16-17*). Legislation authorizing the President to control food and fuel, the Food Control Act, was approved August 10, 1917. The United States Food Administration was set up by Executive order, with Hoover as Administrator, the same day.⁴⁸

Following a conference between Hoover and Houston, an agreement was reached early in August 1917 that the prime function of the Food Administration related to the distribution and conservation of food, and the control and handling of available foods and feeds. On the other hand, the Department of Agriculture directed activities relating to production and distribution of agricultural commodities to markets and the conservation of perishable products by canning, drying, and preserving.⁴⁹

Functions of the two agencies were closely related and coordinated, some carried on jointly—in fact, at times, the operations of the two agencies probably appeared to the public to be indistinguishable. Employees of the State extension services sometimes served as representatives of the Food Administration as well. Inspectors of the Department passed on supplies purchased by agencies of the Food Administration. Both agencies cooperated in special food conservation campaigns during the war period. For example, on January 26, 1918, Hoover asked that the Nation voluntarily observe wheatless Mondays and Wednesdays, meatless Tuesdays, porkless Thursdays and Saturdays, and use of victory bread (*158, pp. 77-78, 100*).

Industry and advisory committees were utilized by both for planning and publicity. A proposal of Secretary Houston made August 15, 1917, for a conference of representatives of the livestock industry was expanded to include representatives invited by Hoover. In calling the conference, they invited the representatives to serve on the proposed United States Livestock Industry Advisory Committee.⁵⁰ At this meeting, September 5 and 6, 1917, a committee was established to safeguard the industry and increase the production of meat. The Secretary of Agriculture and the Food Administrator established, in March 1918, an even more general committee—the Agricultural Advisory Committee—to discuss the agricultural situation, what was being done, and what

should be done. Recommended by the executive committee of the Association of Agricultural Colleges and Experiment Stations to represent farmers and farm organizations, the committee included a number of subcommittees and a continuing executive committee (307, Apr. 17, 1918; 150, p. 206; 310).

While primary responsibility for agricultural production was vested in the Department of Agriculture, the Food Administration used its authority for price control to stimulate the production of wheat, corn, and hogs. Some producers felt that prices so determined worked to their disadvantage. Later in the 1920's agricultural leaders were to use this price regulation as an argument in their fight for governmental assistance to farmers.

Increased wartime demand for wheat prompted the United States Food Administration to agitate for the institution of a minimum price to insure an adequate supply at a reasonable price. From August 30, 1917, when President Wilson announced the price at which the Government would buy wheat, until June 1920, the price was fixed to prevent price fluctuations and yet stimulate production. In practice, this price became the market price. To aid in maintaining the price of wheat at the level decided upon, the United States Food Administration Grain Corporation was established and began operations on September 1, 1917. By dealing in wheat it could exert its influence by acting as a dominant commercial agency in the buying, selling, and distribution of wheat.

Indetermining a price for hogs which would stimulate production of pork and fats, the Food Administration had to plan its program without definite legislative authorization. It recognized that there was a need for using a ratio between the price farmers must pay for corn and the price they must receive for their hogs. On November 3, 1917, it announced a plan to stabilize, through its activities, the price of hogs at \$15.50 per hundredweight, or at about 13 to 1. Purchases for the Allies, the Army and Navy, and other large buyers, such as Belgian Relief and the Red Cross, were channeled through the Food Administration. Packers from whom the purchases were made agreed to pay producers the minimum prices announced by that agency (158, pp. 121-134, 259-269). However, the Administration was unable to maintain these prices.

In the case of sugar, the Food Administration supplemented encouragement of domestic production with a program designed to protect domestic producers at the same time that it controlled distribution. First, the Administration organized the International Sugar Committee to control purchases by American refiners and Allied governments through its monopoly of the purchasing of Cuban sugar. The sugar so purchased was allocated by a committee of refiners. On July 11, 1918, the Sugar Equalization Board was incorporated to equalize the costs of various sugars and secure better distribution. It soon established a basic minimum price at which sugar would be purchased (158, pp. 167-194).

Together, the Food Production Act, the Food Control Act, and

emergency conditions arising from the hostilities in Europe shaped and added to the activities of the Department of Agriculture. The mushrooming of extension work was made possible by the appropriation of \$4,348,400 under the Food Production Act, and more than 1,600 emergency demonstration agents were added in 1917. Under this same act, food and fertilizer surveys were conducted. The Food Production Act provided \$6.5 million, and, in addition, a special appropriation was made to procure seeds to be sold to farmers at cost. Inspection of fruits and vegetables and other food products at central markets was inaugurated during 1917 under authority of the Food Production Act. Under the Food Control Act, nitrate of soda was procured by the War Industries Board and sold to farmers by the Department of Agriculture at cost. Under powers given by the Food Control Act, the Department licensed and controlled the ammonia, fertilizer, farm equipment, and stockyards and related industries. On February 25, 1918, an Office of Fertilizer Control was created in the Office of the Secretary, in accordance with a proclamation of the President, to regulate by licenses the fertilizer industry.

In cooperation with the Department of Labor, the Department of Agriculture had responsibility for the mobilization of labor in rural districts. President Wilson, on July 26, 1918, wrote to Secretary Houston authorizing him to utilize \$5 million from the special President's fund for national defense for seed loans to producers in drought-stricken areas of the West. The Assistant Secretary and the Chief of the Bureau of Crop Estimates were assigned responsibility for organizing the work and approving seed loan applications. County extension agents cooperated with local and county representatives in inspecting fields and verifying statements of applicants. The Federal land banks were to act as the financial agents of the Government in making and collecting the loans. The program was continued the following year. Similar appropriations were made from time to time during the decade of the twenties and until the function was transferred to the Farm Credit Administration when it was established in 1933 (*304, 1918, pp. 32-34*).

Agriculture in the Postwar Period

The unexpected ending of the war presented new peacetime emergency problems to agricultural producers and the Federal Department of Agriculture. Sources of supplies for the Allies, which had been cut off during hostilities, now became available. In this country, the incentive to produce increased quantities was viewed with concern, especially as oversea markets contracted. The expanded area of production, the adoption of new scientific methods,

and the utilization of power machinery had built up production potential without a permanent market potential. During the war emergency the Federal Government had expanded its activities into the marketing field by its allocation of goods, its wheat price guarantee, and its advocacy of a price for hogs. However, many considered this as an emergency operation that should be discontinued when the war ended.

Reorganization of Work

The curtailment of funds available under emergency legislation, such as the Food Production and Control Acts, necessitated the reduction or discontinuance of some activities in the Department. During the postwar period other functions were reorganized and lesser adjustments made. Assistant Secretary Ousley made suggestions relative to the consolidation of the information work. Before leaving the Department, Junius Cook, who had been an assistant to the Secretary, recommended that an office or bureau of rural engineering be established to carry on engineering functions then in the Bureau of Public Roads.⁵¹ On October 6 and 7, 1919, a conference of representatives of the Department of Agriculture, State colleges, and agricultural and trade organizations was held in Chicago to discuss farm power problems. Recommendations were made to the Secretary of Agriculture that Congress be asked to appropriate funds for studies in this field (313). But not until 1921 was any effort made to consolidate all of the agricultural engineering work; in that year a single division was established within the Bureau of Public Roads. Another decade was to pass before it was designated as the Bureau of Agricultural Engineering, in 1931.

Probably the greatest reorganization following the close of the war was that of the Office of Farm Management. It might be said to be another step in effectuating a statement that Secretary Houston made in 1914 to W. A. Taylor, Chief of the Bureau of Plant Industry. At that time, Houston justified the removal of the Office from the Bureau of Plant Industry on the grounds that the work was in the field of rural economics, should be approached from the viewpoint of agricultural economics, and should be strengthened by the inclusion of men with sound economic training.⁵²

While the trend during the early years of Houston's administration had been to concentrate most of the economic functions in the Office of Markets and its successor agencies, the trend in the 1918 and 1919 discussions was to consolidate many of them in the farm management agency. Economists were discussing the subject of the proper field of work for the Office of Farm Man-

agement. On November 1, 1918, G. I. Christie, recently appointed Assistant Secretary; W. M. Jardine, president of Kansas State Agricultural College; and B. H. Hibbard, agricultural economist at the University of Wisconsin, jointly submitted their suggestions for broadening the scope of a bureau of farm management and economics.⁵³

Upon the request of the Secretary, a committee, composed of leaders in the field of farm management and agricultural economics, met early in 1919 to review the operations of the Office of Farm Management and make suggestions on the reorganization of the work. After consulting with representatives of the State agricultural colleges, extension and experiment station workers, and other agricultural workers, the committee made a formal report to the Secretary (311). It recommended that all Department functions relating to farm management and farm economics be placed in a Bureau of Farm Management and Farm Economics. Further, it suggested that the work be organized around projects including studies of cost of production, farm organization, farm finance, farm labor, agricultural history and geography, land utilization, and farm life. The Secretary appointed additional committees to study farm organizations, land economics, and farm life.⁵⁴

On March 8, 1919, H. C. Taylor, head of the department of agricultural economics at the University of Wisconsin, was appointed as Chief of the Office of Farm Management. On July 1, 1919, work on agricultural credit, insurance, and farm life was transferred from the Bureau of Markets and the Office was redesignated the Office of Farm Management and Farm Economics to reflect its enlarged scope of activities (342). The work was organized earlier as recommended by the committee. Charles Galpin, F. W. Peck, and L. C. Gray were brought in to strengthen the leadership, since more emphasis was now placed on economic phases (304, 1919, pp. 29-30).

An Expanding Agriculture in a Contracting Market

During the war period, at the urging of the Federal Government, farmers had increased production by intensified use of fertilizer, control of insects and diseases, greater use of farm machinery, and the extension of production areas. Anticipating a continued expanded market, in spite of high farm wages, increased cost of farm machinery, and higher valuation of lands, farmers continued to expand production and the purchase of purebred livestock. After the Armistice was signed on November 11, 1918, and the

expected drastic slump in prices did not occur, many believed that a higher price level would be maintained. However, Houston apparently had some reservations, for in his annual report for 1919 he stated that he thought a conference, such as that suggested by the President, composed not only of "a generous representation of farmers but also of agricultural agencies and organizations and of business interests which have an intimate relation to farm problems" should be held at "the earliest possible date." No such conference was held at this time (304, 1919, pp. 45-46).

Although surplus crops were being produced, the extension of the wheat price guarantee to cover the 1919 crops, the continued demand by our former Allies as long as credit was extended, and the diversion of surpluses into foreign relief helped to hold prices generally at fairly high levels until the summer of 1920. In part, the decline in prices was forestalled this long by the delay in contraction of credit by the Federal Reserve Board. To add to the farmers' troubles, blanket freight rate increases ranging from 35 to 40 percent were authorized on August 26, 1920, under the Esch-Cummings Transportation Act, coinciding closely with the beginning of the agricultural price decline (26, pp. 168-171). Thus, Edwin T. Meredith, who was appointed as Houston's successor on February 2, 1920, inherited problems that grew out of the wartime expansion of agriculture and which were to continue throughout the decade to come.

¹ John W. Payne, David F. Houston: A Biography, Ph. D. Dissertation, University of Texas, 1953, pp. 83-146.

² B. T. Galloway to W. O. Thompson, Association of Agricultural Colleges and Experiment Stations, Oct. 27, 1913, Secretary's Correspondence, USDA, National Archives.

³ Milton Whitney to B. T. Galloway, Mar. 3, 1914, Secretary's Correspondence, USDA, National Archives.

⁴ Report of the Committee on Projects, May 11, 1914, Secretary's Correspondence, USDA, National Archives.

⁵ B. T. Galloway to W. Swingle, June 16, 1914; Memorandum of the Secretary, July 1, 1914, Secretary's Correspondence, USDA, National Archives.

⁶ 38 Stat. 1086.

⁷ Memorandum of the Secretary, Apr. 4, 1913, Secretary's Correspondence, USDA, National Archives.

⁸ Memorandum of E. H. Bradley, July 14, 1921, Secretary's Correspondence, USDA, National Archives.

⁹ B. T. Galloway to C. C. Clark, James R. Jones, and W. P. Jones, Apr. 28, 1913, Assistant Secretary's Outgoing Correspondence, USDA, National Archives.

¹⁰ R. Lyle Webster, The Informational and Educational Work of the U.S. Department of Agriculture, Ph. D. Dissertation, American University, 1958, pp. 27-30.

¹¹ B. T. Galloway to Chiefs of Bureaus, Apr. 29, 1913, Secretary's Correspondence, USDA, National Archives.

¹² Report of the Committee on Publications and Publicity, May 15, 1913, Secretary's Correspondence, USDA, National Archives.

¹³ Assistant Secretary's Memorandum, June 16, 1913, Office of Information Correspondence, USDA, National Archives.

¹⁴ Assistant Secretary's Outgoing Correspondence, USDA, National Archives.

¹⁵ B. T. Galloway to J. R. Mohler, Oct. 27, 1913, Secretary's Correspondence, USDA, National Archives.

¹⁶ Clarence Ousley to Secretary Houston, Sept. 11, 1917, Secretary's Correspondence, USDA, National Archives.

¹⁷ Clarence Ousley to the Secretary, July 31, 1919; Floyd Harrison to L. M. Estabrook, Aug. 5, 1919, Secretary's Correspondence, USDA, National Archives.

¹⁸ David F. Houston to A. Lawrence Lowell, Apr. 1, 1913, Secretary's Correspondence, USDA, National Archives.

¹⁹ David F. Houston to Samuel P. Abelow, Apr. 24, 1913, Secretary's Outgoing Correspondence, USDA, National Archives.

²⁰ Charles Brand to D. F. Houston, July 10, 1914, Secretary's Correspondence, USDA, National Archives.

²¹ 38 Stat. 1111.

²² 37 Stat. 854.

²³ U.S. Department of Agriculture, Department Conference on the Marketing and Distribution of Farm Products, Mar. 27, 1913, typewritten manuscript, 65 pp. (in USDA Library).

²⁴ Office of Markets Project Statement, May 16, 1913, Project Statements, U.S. Bureau of Agricultural Economics, National Archives.

²⁵ T. N. Carver to B. T. Galloway, July 13, 1913, Secretary's Correspondence, USDA, National Archives.

²⁶ B. T. Galloway to Edward Keating, Oct. 23, 1913, Secretary's Outgoing Correspondence, USDA, National Archives.

²⁷ 38 Stat. 693; 39 Stat. 476; 39 Stat. 486; 39 Stat. 482; 39 Stat. 673; Adolph G. Ensrud, A History of the Origin and Functions of the Federal Bureau of Markets, M.A. Dissertation, University of Chicago, 1922, pp. 82-112.

²⁸ 39 Stat. 482.

²⁹ 39 Stat. 486.

³⁰ 39 Stat. 673.

³¹ 39 Stat. 1162.

³² 38 Stat. 436.

³³ Walter Swingle to C. J. Brand, Aug. 19, 1914, Secretary's Correspondence, USDA, National Archives.

³⁴ 39 Stat. 470.

³⁵ B. T. Galloway to Wallace Buttrick, Apr. 26, 1913; Memorandum of B. T. Galloway, May 26, 1913; B. T. Galloway to E. Davenport, Dec. 8, 1913, Assistant Secretary's Outgoing Correspondence, USDA, National Archives.

³⁶ 38 Stat. 372.

³⁷ Memorandum of Walter Swingle, July 30, 1913, Secretary's Correspondence, USDA, National Archives.

³⁸ 39 Stat. 471.

³⁹ 39 Stat. 929.

⁴⁰ 40 Stat. 274.

⁴¹ 37 Stat. 832; 39 Stat. 1138.

⁴² 40 Stat. 755.

⁴³ 39 Stat. 355.

⁴⁴ 40 Stat. 1000.

⁴⁵ 39 Stat. 360.

⁴⁶ Secretary's Correspondence, USDA, National Archives.

⁴⁷ 40 Stat. 273.

⁴⁸ 40 Stat. 276; 40 Stat. 274.

⁴⁹ Herbert Hoover to D. F. Houston, Aug. 8, 1917; D. F. Houston to Herbert Hoover, Aug. 13, 1917, Secretary's Correspondence, USDA, National Archives.

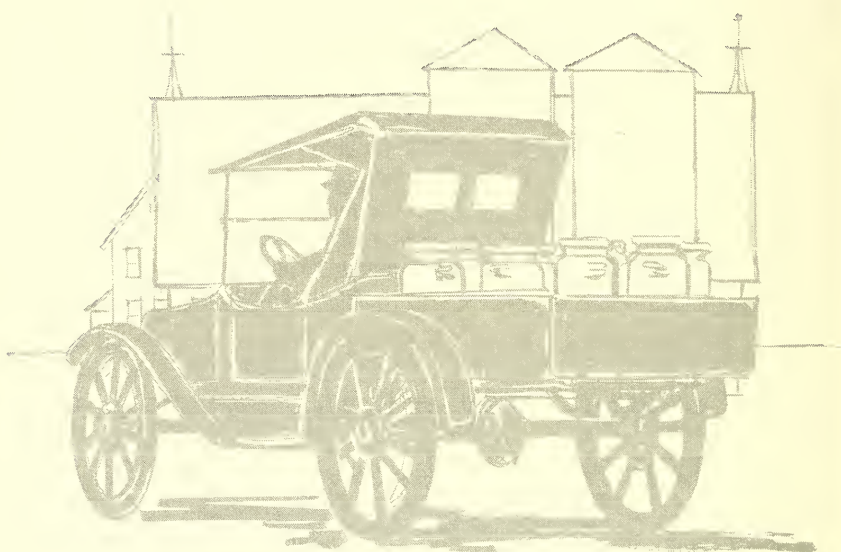
⁵⁰ D. F. Houston to C. F. Curtiss, Aug. 15, 1917; D. F. Houston and Herbert Hoover to C. F. Curtiss, Aug. 21, 1917, Secretary's Correspondence, USDA, National Archives.

⁵¹ Junius Cook to Secretary of Agriculture, June 5, 1919, Secretary's Correspondence, USDA, National Archives.

⁵² D. F. Houston to W. A. Taylor, Sept. 29, 1914, Secretary's Correspondence, USDA, National Archives.

⁵³ G. I. Christie, W. M. Jardine, and B. H. Hibbard to the Secretary of Agriculture, Nov. 1, 1918, Secretary's Correspondence, USDA, National Archives.

⁵⁴ Reports of these committees were issued by the Office of the Secretary, USDA, as Circulars nos. 135 (May 1919), 138 (June 1919), and 139 (June 1919).



*“We should help develop
more efficient marketing
systems.”*

A Changing Approach to Agriculture

Edwin T. Meredith's appointment as Secretary of Agriculture, February 2, 1920, was warmly acclaimed by his fellow journalists, who cited him as a great friend of the farmer. Meredith succeeded David F. Houston, who had chosen to move to the post of Secretary of the Treasury. Although Meredith lacked scientific training, he had been successful in agricultural journalism and business.

Meredith, the second Secretary of Agriculture from Iowa, had become widely known as editor of *Successful Farming*. He had previously held several appointive positions in the Federal Government; these included Director of the Federal Reserve Bank in Chicago and member of the Excess Profits Board of Review of the Treasury Department. He had been a director of the United States Chamber of Commerce and chairman of its agricultural division. Just prior to his appointment as Secretary of Agriculture, Meredith had been elected president of the Associated Advertising Clubs of the World (208).

Entering office in the postwar period, the new Secretary was to be plagued with a variety of problems. His first statement on February 3, 1920, set the tone for his administration. Commenting on the number of complaints already received on the high cost of living, he said the responsibility lay in all segments of the economy rather than in agriculture alone. Efficiency needed to be applied in the marketing and distributive sectors (312, no. 45-20). Meredith stressed the interrelationship of the business and farm economies, emphasizing that agriculture was the basic industry upon which the rest of the economy depended. He saw the dependence of the industrial East on the agricultural South and West for food, raw materials, and an expanding labor supply. However, he was well aware that agricultural producers were competing with domestic industries and with producers in other countries (312, no. 181-20).

During his term of office, February 2, 1920, to March 4, 1921, the Secretary used many of the approaches he had followed as

publisher of *Successful Farming*. In relations with the public as well as within the Department, he stressed selling the services and research results of the agency to the urban public as well as to the rural population. Appearing before bankers' organizations, chambers of commerce, and civic and trade groups, Secretary Meredith challenged them to promote agriculture, an activity which he assured them would, in the end, prove to their advantage (312, nos. 369-20, 410-20). He felt that, especially after the drastic decline in prices of farm products in September 1920, the commercial interests should assist agricultural producers to meet emergencies and to fight for a satisfactory standard of living, "for there is nothing of greater importance to the welfare of the country than a permanent agriculture" (148).

From the beginning, the new Secretary indicated his desire to receive suggestions and criticism from all groups. He welcomed delegates from farm organizations, trade groups, and other associations. He told the executive committee of the American Farm Bureau Federation in March 1920: "This Department of Agriculture is designed to serve and I expect your active interest and cooperation" (312, no. 98-20).

Secretary Meredith was greatly concerned with the future of agriculture as a whole. Soon after entering the Department, in a statement on the agricultural situation for the *World Outlook*, he pointed to the need for a well-balanced production of agricultural commodities, with each producer raising crops and livestock that experience had demonstrated he could produce most efficiently (312, spec. no. 269). He stressed another phase of the agricultural problem in an address on September 24, 1920:

. . . farm prices must be so stabilized as to hold out to the farmer a reasonable prospect that, at the close of the crop season, he will find a ready market at prices which will compensate him for his labor and investment (312, no. 368-20).

Meredith saw no single solution to the problems farmers faced. He knew that they often received less for an extraordinarily good crop than for a short one. In one public statement he said:

One thing that would remedy this is some means of carrying over to periods of low production, wherever feasible, the surplus from years of high production. More attention to marketing and the development of latent consumption demand in years of large supply also would be helpful (304, 1920, p. 15).

In a letter to Henry C. Wallace, then publisher of *Wallaces' Farmer*, Meredith wrote that he was placing increased emphasis on economic activities of the Department, and that the answer to the agricultural problem lay in "seeing that the farmer gets the right prices for what he produces and satisfactory conditions for production," but that he did not believe that the Government should control production.¹

Meredith's interest in agricultural policy continued after he left the Department. He saw no logic in producing crops for export that the world market would not absorb. He advocated govern-

mental price fixing for six basic commodities prior to planting; then planters could plan their production in line with these advance prices (149). Later, in 1926, he proposed the appointment of an Agricultural Stabilization Commission, composed of the Secretaries of Commerce, Labor, and Agriculture and four other members appointed by the President. The Commission would fix the prices of six basic commodities—wheat, corn, sugar, cotton, butter, and wool—in advance of the planting season. At the end of the marketing year, the Commission would buy up the surplus and sell it abroad for what it would bring.²

Meredith became Secretary of Agriculture at a time when agricultural thinking was to turn to economic questions, a trend that was to become more pronounced during the years of the 1920's that followed his administration, and would lead into the active governmental programs of the New Deal. Rapid decline in agricultural prices in September 1920, an increase in freight rates, and continued high costs of production brought mounting pressure for action by the Government. During the 3d session of the 67th Congress—December 6, 1920, to March 4, 1921—pressure was exerted for the passage of agricultural relief legislation.³ A bill to revive for the second time the War Finance Corporation to finance exports was passed over President Wilson's veto.⁴ It had previously been revived to assist exporters by the extension of credit, but its activities were ended on May 10, 1920, by an order of Secretary of the Treasury Houston.⁵ An attempt to override the veto of another bill designed to aid agriculture, a tariff on agricultural commodities, was unsuccessful. In both cases, President Wilson's veto message was drafted by David F. Houston, Meredith's predecessor in the Department of Agriculture (113, vol. 1, pp. 110–115, 141–147). The Christopherson bill, also introduced in this session of Congress, would have authorized the United States Grain Corporation to buy surplus flax, wheat, corn, and oats, and dispose of the surpluses for the public welfare.

Within the Department, the proposal was made that a conference of agricultural leaders and representatives of organized labor, banking, commerce, transportation, and the professions be called to consider some of the problems confronting agriculture. Four bureau chiefs recommended against calling such a formal conference in an election year and suggested that the Secretary, with the approval of the President, call a less formal conference, or a series of conferences.⁶ The convening of such a conference was to await the change in administration and the appointment of Henry C. Wallace as Secretary of Agriculture. However, a group of southern and western farmers, impatient over the lack of activity, did meet in Washington with Secretary of Treasury Houston and Secretary of Agriculture Meredith in the fall of 1920 to discuss their problems. Henry C. Wallace, in a critical editorial in *Wallaces' Farmer*, commented: "This thing of sending untrained committees to deal with the big interests gets us nowhere. They can

complain but they have nothing constructive to offer" (372, *Oct. 22, 1920*).

Research Reemphasized

Meredith indicated his basic conception of the importance of research in the Department, and gave it greater emphasis than his predecessor had done. "Research," he stated, "is the foundation of agricultural progress. Without it most of our agricultural activities could not exist" (147). His concern for scientific and economic research was expressed by his selection of Elmer D. Ball as Assistant Secretary, by urging better salaries for Department employees, and by incorporating in his appropriation estimates the position of Director of Scientific Work. Another example of the trend to strengthen research was the establishment, in 1920, of the Office of Development Work in the Bureau of Chemistry. The purpose of this office was to assist business in applying scientific developments to industrial uses (312, *no. 338-21*; 304, 1920, *p. 42*).

Elmer D. Ball, a Republican in a Democratic administration, was appointed primarily to direct the scientific work. He had been a professor of zoology and entomology at Iowa State College and State entomologist immediately before he came to Washington, and, previously, the dean of the Agricultural College and director of extension at the University of Utah. He continued in his position in the Department under Henry C. Wallace through September 30, 1921, when he was appointed Director of Scientific Work (141, *p. 214*).

Caught in the postwar congressional economy drive, the request of the Department for funds for the fiscal year beginning July 1, 1920, was cut. As a result, the Department curtailed activities that included work related to animal and cereal diseases, pink bollworm, irrigation agriculture, marketing, crop and livestock reporting, and soil surveys.

The heavy personnel turnover in the Department was a closely related problem. Many employees went to better paying positions in private industry, State agencies, and agricultural colleges. Meredith insisted that salaries should be increased to retain and attract well-qualified employees to the Department. Now that the war was over, emphasis was placed upon reduction in Government expenditures.

Meredith not only wished to continue work underway, but he advocated addition of other activities, and further reorganization within the Department. Market news was first broadcast by radio December 1, 1920, a means to be used on a nationwide basis beginning June 20, 1921 (314, *June 29, 1921*). Some of Meredith's recommendations on reorganizing work were not given legislative authorization until after Henry C. Wallace became Secretary of Agriculture.

Meredith's recommendation for the establishment of the positions of Directors of Scientific and Regulatory Work parallel suggestions made in 1914 and 1915. According to the proposal included in the budget estimates and incorporated in the Appropriation Act for the fiscal year 1922, the Directors were to coordinate the work in the two spheres in the Department, and also plan and coordinate it with that of the States (*146; 304, 1920, p. 70*).

Steps taken to strengthen economic research prepared the way for its consolidation, and for greater emphasis on it during the administration of Henry C. Wallace. The Office of Farm Management and Farm Economics became independent of the Office of the Secretary in January 1920. The Chiefs of the Bureaus of Markets and Crop Estimates recommended, September 17, 1920, that their Bureaus be combined.⁷ The Secretary approved the proposal, which was authorized by the Appropriation Act for 1922 (*283, 1922, p. 619*).

Several changes were made in the Office of the Secretary. On September 16, 1920, the position of Director of Information was established. This Director, like Assistant Secretary Ousley during World War I, was assigned general supervision of all information and publications issued by the Department. He gave attention to broad matters of policy and coordinated activities in the bureaus with those of the Division of Publication. At this time, the Office of Information disappeared, and its functions were assigned to the Press Service (*306, no. 327*).

Henry C. Wallace Becomes Secretary

With the victory of the Republican Party in the 1920 election, with its slogan "Return to Normalcy," Henry C. Wallace was appointed Secretary of Agriculture, the third person in that office from Iowa. Wallace had helped write the agricultural plank for the Republican platform and he had made contributions to Harding's campaign speeches on the agricultural situation (*136, pp. 215-216*). When he came to Washington he was described as one who had made it his business to know the farmers' needs and to further "good farming and good thinking on problems connected with food production and distribution" (*70*).

At the time Henry C. Wallace took his oath of office, March 5, 1921, American agriculture had entered upon a sharp and damaging depression, and agricultural groups were turning to Government for aid. President Harding's Cabinet was divided on agricultural policy. His Secretary of Commerce, Herbert Hoover, represented the more conservative business attitude. Henry C. Wallace became the advocate of ideas incorporated in the McNary-

Haugen bill. The attitudes of the two men were also diverse as to the scope of work of the Department of Agriculture. At a dinner that the Standard Farm Paper Publishers' Association gave for New York businessmen, Wallace said, "The Department of Agriculture is charged with the duty of promoting agriculture in its broadest sense" (312, no. 846-21). To him, this meant any aspect of production or marketing of agricultural commodities (312, no. 705-21). Secretary Hoover considered that the proper scope of the Department should be limited to production. He indicated that the Department of Commerce should be concerned with the marketing of these products.

Henry C. Wallace brought Charles J. Brand and William J. Spillman back to the Department. Former Chief of the Bureau of Markets, Brand returned to the Department as a consulting specialist in marketing. He was one of several specialists sent to Europe in 1921, seeking new markets for agricultural commodities. In May 1923, he was directed to draft a legislative measure incorporating the export disposal ideas of George Peek, one of the originators of "equality for agriculture." William J. Spillman, Chief of the Office of Farm Management from its establishment in 1905 until 1918, returned to the Department as a consulting specialist on January 3, 1922. Later he became well known for his domestic allotment plan.

Publication of a special series of five yearbooks to assist farmers in solving urgent problems began in 1921. The yearbooks from then through 1925 dealt with economic aspects of agriculture as they related to grains, livestock, fibers, dairy products, tobacco, forestry, forage resources, land utilization and tenure, highways, credit, taxation, the poultry industry, weather forecasting, and fruits and vegetables.

Russell Lord compared the administration of Henry C. Wallace with that of Tama Jim Wilson, a longtime friend of the Wallace family.

He went even further than Tama Jim in assigning able men to important chiefships or special assignments, sparking them with ideas to supplement their own, then crediting the whole result, if it came out right, to them; or backing them up, silently and steadily, if it didn't. Men who have been in the Department a long time observed that under most secretaries they often felt that they were ghosting for a passing figurehead as Secretary; whereas, when you worked under H. C. Wallace he was up there in the front office, from eight in the morning until six in the evening, coolly taking the heat of blasts from the White House, the Capitol, and elsewhere, absorbing the blame with neither haste nor worry, passing the credit to subordinates—ghosting for them (136, p. 224).

The Secretary's Immediate Assistants

Henry C. Wallace retained E. D. Ball, who had served under Meredith, in the position of Assistant Secretary, until September

30, 1921, when Ball was appointed Director of Scientific Work. Charles W. Pugsley, editor of the *Nebraska Farmer*, succeeded Ball, October 1, 1921. He had previously been professor of farm management at the University of Nebraska and State director of extension. As Assistant Secretary he was assigned responsibility for the supervision of extension activities and work of the Press Service. Pugsley left the Department on September 4, 1923, to become president of South Dakota State College. Howard M. Gore, the first Assistant Secretary to become Secretary of Agriculture, took office on September 17, 1923. After Henry C. Wallace's death, October 25, 1924, Gore became Acting Secretary and later was formally appointed as Secretary (141, pp. 213-214).

The positions of Director of Scientific Work and Director of Regulatory Work were established by the Appropriation Act for 1922, at a level between the bureau chiefs and the Secretary (141, p. 65). These offices, with that of Director of Extension Work set up in 1923, broadly divided the work of the Department into scientific, regulatory, and extension, somewhat in the same way that the work in the States was organized in the State colleges and departments of agriculture.

E. D. Ball became Director of Scientific Work, October 1, 1921. The position was authorized by the Appropriation Act for that fiscal year.⁸ The Director was assigned general supervision over the scientific research of the Department. He was required to consult with the bureau chiefs and the Secretary on matters concerning scientific personnel, scientific publications, plans for scientific work, and coordination and correlation of this with the view of directing it toward the solution of national agricultural problems (306, no. 351).

Although the position of Director of Regulatory Work was authorized by the Appropriation Act for 1922, Secretary Wallace did not fill it until October 1923. Walter G. Campbell, the first Director, had been Acting Chief of the Bureau of Chemistry. In his new capacity, Campbell was given general supervision over the regulatory activities of the Department. He was directed to advise the Secretary and bureau chiefs on the formulation of plans and policies, the coordination and correlation of regulatory activities of bureaus and offices of the Department, and cooperation with other branches of the Government and State agencies and institutions (306, no. 449).

The Administrative Organization

By the time Henry C. Wallace entered the Department, interest in the Government organization had increased. The Bureau of Efficiency, an independent agency, had been conducting studies of the organization of the various departments to locate duplication of work. After the Joint Congressional Committee on Reorganiza-

tion was authorized by a joint resolution of December 29, 1920, the Bureau supplied it with material for its study.⁹ Later, in 1924, when the committee hearings were held, Secretary Wallace protested the proposed transfer of some of the work out of his Department.

The Secretary was confronted not only by this study of overall governmental organization which might affect the scope of work and the organizational structure of the Department, but also by changes approved by the Appropriation Act before he came to the Department. This act provided for the consolidation of the Bureaus of Markets and Crop Estimates as well as the appointment of Directors of Scientific and Regulatory Work.¹⁰

Secretary Wallace took initial steps to realine the structure of his Department. On March 10, 1921, he asked the chiefs of the bureaus and offices to send him statements on the duplication of work in the bureaus and other governmental departments and submit plans for reorganizing work. At a conference of the bureau chiefs on reorganization on March 17, 1921, Wallace designated E. D. Ball as his representative to receive suggestions from the chiefs. Other conferences were held on March 18 and 20, 1921.¹¹ The bureau chiefs forwarded their recommendations to Ball. He, in turn, made his to the Secretary, including one on April 1, 1921, that the States Relations Service be abolished.¹² Many suggestions were received from land-grant college personnel, the agricultural press, and other interested persons. Some letters recommended the organization of the Department of Agriculture under directors for scientific research, regulatory work, and extension service.

The Office of the Secretary

Government-wide interest in reorganization was reflected in the Office of the Secretary. Additional administrative units were established, while others were transferred to it. Secretary Henry C. Wallace gave further emphasis to economic aspects of the Department's work and the development of overall policy. The appointment of the Departmental Committee on Simplified Office Procedure, on June 12, 1924, to promote economy, efficiency, and uniformity of action showed the continuing interest of the Secretary's Office (306, no. 486).

As administrative units and functions were established, two people were appointed to administrative positions, who, as the years passed, became well known in their respective fields, William A. Jump and Warner W. Stockberger.

William A. Jump was designated, July 8, 1922, as Departmental Budget Officer, in charge of the annual estimates and other appropriation matters. He had entered the Department's service as a messenger in 1907, and studied accounting and law in night school. He served as private secretary and administrative as-

sistant to Secretary Wallace. He was also assigned general supervision and coordination of the business organization and policy of the Department (306, no. 389).

Warner W. Stockberger had entered the Bureau of Plant Industry as a botanist in 1903 and had become an expert on medicinal plants. He had been detailed to work on the study of the Joint Congressional Committee for Reclassification which led to the Classification Act of 1923.¹³ After the act was passed, Stockberger was appointed on May 11, 1923, as Departmental Classification Officer. He was to direct the activities of the Department in carrying out the act. He was also appointed chairman of the Departmental Classification Committee, composed of the classification officers of the various bureaus and offices. Stockberger was primarily responsible for working out the personnel classification system of the Department under the new Government-wide regulations (306, no. 433).

A number of other changes were made in the Office of the Secretary. Some of these concerned offices performing information work. On April 6, 1923, the Office of Traffic Management was established to supervise shipping and transportation activities (306, no. 430). Additional changes were made on July 1, 1923. Pursuant to an Executive order of July 1, 1921, a Director of Purchases and Sales was appointed. This officer was responsible for the general direction and coordination of all purchase and sales activities of the Department (306, no. 437). Inasmuch as the Appropriation Act transferred to the Office of the Secretary certain functions of the States Relations Service and Division of Publications, a new unit, the Office of Accounts, was established. This Office, under the direction of a chief accountant, was responsible for the appropriation accounting work in the enlarged Office of the Secretary (306, no. 421).

Information Work

During the Houston and Meredith tenures of office, the information activities had been stressed and centralized to some extent in the Division of Publications. The period 1921-25 saw changes. On November 16, 1921, the Office of Exhibits was transferred from the Division of Publications to the Office of the Secretary, and on July 1, 1923, to the Office of the Director of Extension Work. On December 27, 1921, the Press Service was transferred from the Division of Publications to the Office of the Secretary. On July 1, 1923, the Division of Publications was abolished and the Editorial; Illustrations; Distribution; and Addressing, Duplicating, and Mailing Sections were transferred to the Office of the Secretary. At the same time, the Office of Motion Pictures was transferred from the Division of Publications to the Office of the Director of Extension Work (306, nos. 355, 362, 436). On September 5, 1923,

some of the sections which had been in the former Division of Publications were brought together again as the Office of Publications by Secretary's Memorandum 450. This represented a change in title in accordance with a departmental plan of nomenclature. However, by December 24, 1924, it was again referred to as the Division of Publications, when the editorship of the *Journal of Agricultural Research* was transferred to the Division (306, no. 512).

Scientific Organization

In this period of reorganization, two new scientific bureaus were established by the elevation of existing organizational units. The need for both bureaus had been emphasized for many years. In 1913, Walter Swingle, then a member of the committee on reorganization, had recommended that a Bureau of Home Economics be formed, and an office was established within the States Relations Service. Assistant Secretary Pugsley read a statement of Secretary Wallace at the meeting of the American Home Economics Association, August 3, 1922 (312, no. 110-23). In this, Wallace indicated his intention to expand the work and later to establish a bureau under the leadership of a woman. Later that year a request for such a bureau was made in the appropriation estimates. On July 1, 1923, the Bureau of Home Economics was established with Louise Stanley as its first Chief.¹⁴ Louise Stanley, a friend of the Wallace family, had been chairman of the home economics division at the University of Missouri.

On the other hand, dairying interests had worked hard for the creation of a Bureau of Dairying. Though a group had met with Secretary Houston in 1916, it had been unable to influence him, but by 1924 the situation had changed, for Secretary Wallace was a dairy specialist (42, pp. 15-16). A specific bill was approved establishing the Bureau of Dairying, May 29, 1924.¹⁵ The act defined its functions as investigation of the dairy industry and the dissemination of information for the promotion of the industry.

While regulatory and other legislation added to the duties of the Department, its organization was not supplemented to any great extent by transfers from other agencies. The transfer of the Fixed Nitrogen Laboratory, established by the Secretary of War on March 29, 1919, was an exception. It became an independent unit in the Department of Agriculture on July 1, 1921. It continued, until 1926, to operate under funds appropriated for it in the War Department in 1919. When these funds were exhausted, the Laboratory became a part of the Bureau of Soils (379, pp. 106-108).

The Office of Congressional Seed Distribution in the Bureau of Plant Industry was discontinued on July 1, 1923. Previously, the

distribution of seeds to Congressmen had been protested by Secretaries of Agriculture, seedsmen, and agricultural journalists. The Department had not included this in its request in the appropriation estimates, but the item was continued year after year (177, p. 13).

Consolidation of Economic Work

Crucial economic problems were facing the Department, and authorization had already been granted by Congress to consolidate part of its economic work. This aspect played an important part in discussions on reorganization of the Department. The Secretary appointed an economic committee composed of bureau chiefs on May 25, 1921. The committee was directed to make a study of the economic condition of agriculture, consult with agricultural leaders, draw up recommendations for dealing with the problem, and study the economic work within the Department.¹⁶ Economists consulted by the committee included Thomas F. Hunt, Andrew Boss, G. F. Warren, G. I. Christie, and Thomas F. Cooper. The report, made June 18, 1921, recommended the consolidation of all economic research and service activities in a Bureau of Agricultural Economics.¹⁷ It also recommended that regulatory activities be combined in a Federal agricultural marketing board.

In accordance with the provisions of the Appropriation Act, the Bureau of Markets and the Bureau of Crop Estimates were combined and redesignated the "Bureau of Markets and Crop Estimates" on July 1, 1921, with Henry C. Taylor as Chief.¹⁸ He was formerly Chief of the Office of Farm Management and Farm Economics. Taylor made plans at the same time to combine with the new Bureau the administration of the Office of Farm Management and Farm Economics (312, no. 1-22). Formal consolidation had to await legal authorization. On July 9, 1921, Taylor issued instructions on the integration of the work.¹⁹ G. F. Warren, from Cornell University, was appointed in 1921 as a consulting specialist to the Chief of the Bureau of Markets and Crop Estimates to assist in the reorganization and consolidation of work (307, Aug. 10, 1921).

The Bureau of Agricultural Economics was established on July 1, 1922, under authority of the Appropriation Act.²⁰ The Bureau was organized around three functional headings: production, marketing, and general. The production divisions included Farm Management, Cost of Production, and Crop and Livestock Estimates. The marketing divisions were Cotton; Fruits and Vegetables; Warehousing; Livestock, Meats and Wool; Hay, Feed, and Seed; City Markets—Washington Center Market; Grain; Dairy and Poultry Products; and Cost of Marketing. Divisions assigned

more general functions were Agricultural Finance, Agricultural Cooperation, Farm Population and Rural Life, Land Economics, Statistical and Historical Research, and Information (312, nos. 1007-22, 1005-22).

Under the Bureau of Agricultural Economics, much of the foreign work was delegated to the Division of Statistical and Historical Research. However, when it was proposed in 1923 that expanding markets abroad might promise a solution of the farm problem, Charles J. Brand drew up a proposal for a separate agency, a Foreign Agricultural Service. All foreign activities of the Department would be consolidated in this agency.²¹ Brand had represented the Department in looking for outlets for agricultural products in Europe. However, a separate Foreign Agricultural Service was not established until December 1, 1938.

Abolition of States Relations Service

The States Relations Service was abolished on July 1, 1923, and a Director of Extension Work was appointed. To the Office of Director of Extension Work were transferred the Office of Exhibits and the Office of Motion Pictures. The Office of Experiment Stations was transferred to the Office of the Director of Scientific Work (306, no. 436).

Extension Organization

Although extension work did not receive the emphasis it had during the war years, organizationally it attained status as a separate entity. On October 1, 1921, the Office of Extension Work in the South and the Office of Extension Work in the North and West were combined in the single Office of Extension Work within the States Relations Service. This Office was to "deal with the farmers' cooperative demonstration work and the Smith-Lever agricultural work in the 48 States." When the States Relations Service was abolished on July 1, 1923, the Office of the Director of Extension Work and the Extension Service were established. The Office of Exhibits and the Office of Motion Pictures were transferred to the new Office, and the Assistant Secretary was appointed as Acting Director of Extension Work. Clyde W. Warburton was designated as Director of Extension Work, September 24, 1923 (306, nos. 347, 436, 442, 451). The scope of extension demonstrations was broadened when the unit Demonstrations on Reclamation Projects was transferred from the Bureau of Plant Industry to the Extension Service by Secretary's Memorandum 498, August 8, 1924.

Legislation

During the 1920's, cooperative marketing was urged as one solution for agricultural maladjustment. The Sherman Antitrust Act of 1890 did not contain any reference to cooperative associations. When this act was amended by the Clayton Act in 1914, section 6 of the act ostensibly assured labor and agricultural associations the right to exist without violating the antitrust laws. This section, referring only to nonstock associations, was generally not considered a guarantee to farmers of the right to form marketing cooperatives. Thus, the Capper-Volstead Act, approved February 18, 1922, was passed to make it clear that the elimination of competition between individual agricultural producers, which occurs when they act together through a cooperative association, would not in and of itself constitute an antitrust violation.²²

From the beginning of the century, the subject of credit for agriculture had been one of lively debate. The Federal Reserve Act, passed in 1913, provided credit for the industrial and commercial sectors of the economy, but made no provision for agricultural representation on the Federal Reserve Board. An amendment to the act, approved June 3, 1922, did, however, provide for an agricultural representative. When long-term and short-term credit was provided to farmers under the Federal Farm Loan Act of 1916, no provision was made for intermediate credit. The Agricultural Credits Act, approved March 4, 1923, provided for the establishment of 12 Federal Intermediate Credit Banks in the Federal farm loan system and authorized the formation of National Agricultural Credit Corporations to make livestock loans.²³

Complaints had also been made about the practices of stockyards and packinghouses. During the war, the stockyards and packing industry had been regulated under emergency legislation. Efforts were made to put this on a permanent basis. On August 15, 1921, the Packers and Stockyards Act was approved.²⁴ It provided for the regulation of practices of meatpackers engaged in interstate operations and the marketing of livestock through public stockyards. The administration of the act was assigned to the Secretary of Agriculture. Chester Morrill, Assistant Chief of the Bureau of Markets and Crop Estimates, was appointed Assistant to the Secretary, September 16, 1921, to set up the necessary administrative organization (*307, Sept. 28, Oct. 12, 1921*). The Packers and Stockyards Administration was operating as an independent agency in the Department, with Morrill as Chief, by September 30, 1921.²⁵

At this time proposals to regulate the grain trade also resulted in Federal legislation. Farmers and their organizations had been advocating the prohibition or regulation of speculation in grain futures for more than 35 years. In August 1921, legislation to regulate futures trading and prevent price manipulation on the

grain exchanges was enacted by the Congress as the Grain Futures Trading Act. Secretary Wallace placed Chester Morrill, Assistant to the Secretary, in charge of its administration.²⁶ The exchanges contested the legislation, which was predicated on the taxing power of Congress, and on this basis most of its provisions were declared unconstitutional, in May 1922. The legislation was soon reintroduced, however, based on the authority of Congress to regulate interstate commerce, and was enacted as the Grain Futures Act, approved September 21, 1922.²⁷ This act was held constitutional. The Grain Futures Administration was established as the enforcement agency.

Expansion of Forestry Activities

The Nation's forest industries and the Forest Service had contributed to the war effort. At the end of the war, a reappraisal was in order. Senate Resolution 311, passed February 21, 1920, directed the Secretary of Agriculture to make a report on timber depletion, lumber prices and exports, and timber ownership in the United States. The report, sometimes referred to as the Capper Report, prepared by the Forest Service and submitted by Secretary Meredith on June 1 of that year, gave the most complete report on the subject up to that time. It discussed the need for measures to prevent further devastation and recommended Federal and State legislation (336).

The Clarke-McNary Act, approved June 7, 1924, broadened the Federal authority for land purchase established by the Weeks law of 1911. Under the new legislation, land necessary for timber production, as well as the protection of navigation within the watersheds of navigable streams, could be purchased. The Secretary of Agriculture was authorized to enter into cooperative agreements with the States in order to protect State and private forests against fire. Other sections of the act provided for studies of forest taxation; cooperation with the States in the production and distribution of forest planting stock for windbreaks, shelterbelts, and farm woodlands; and cooperative work in farm forestry extension. The act greatly expanded Federal-State cooperation in forestry work and gave encouragement to the establishment and development of State forestry agencies.²⁸

Problems in Extension Work

The formal organization of the American Farm Bureau Federation in 1920, following a meeting of the State Bureaus in 1919, led

to consideration of the relationships between the county agents and the Farm Bureaus. Complaints were made by other organizations that county agents were promoting Farm Bureaus. On April 21, 1921, A. C. True, Director of the States Relations Service, and J. R. Howard, president of the American Farm Bureau Federation, signed a memorandum on the "basis of cooperation" between the Farm Bureaus and the extension services (228, pp. 168-171). This defined the functions of the county agents. On August 25, 1922, Secretary Henry C. Wallace stated that cooperative extension workers—

. . . may not properly act as organizers for farmers' associations; conduct membership campaigns; solicit membership; edit organization publications; manage cooperative business enterprises; engage in commercial activities; act as financial or business agents, nor take part in any of the work of farmers' organizations.

They were, however, to work "with farmers' organizations willing to cooperate in the work with which the cooperative extension agent is charged" (312, no. 190-23).

As the work of the Department expanded in the States, the question of cooperative relations between the Federal department, the Association of Land-Grant Colleges, and the National Association of State Commissioners, Secretaries, and Departments of Agriculture was discussed. In a letter to State Governors on February 23, 1923, Secretary Wallace stated the policy of the Department in this field. Basically, the work was divided into regulatory, research, and extension functions. In conducting regulatory activities, the Department cooperated with the State departments of agriculture or law enforcement agencies. Cooperative research work was carried on with the experiment stations of the land-grant colleges. The Department carried on extension work in agriculture and home economics through the cooperative State extension offices. Wallace concluded with the statement that the National Association of Commissioners, Secretaries, and Departments of Agriculture and the Association of Land-Grant Colleges had endorsed this policy (14, 1923, pp. 228-230).

The Master Farmer Movement

The State extension services cooperated in projects to encourage better farming and to give recognition to agricultural leaders. One of these was the Master Farmer Movement. Early in 1925, the *Prairie Farmer* began promoting the idea of awards to outstanding Illinois farmers. In December 1925, awards were given at a banquet in Chicago. Nominations could be made by county agents, agricultural colleges, agricultural journals, or by anyone other than the farmer or his family (94). The movement shortly spread from Illinois to other States, where, in some instances, other titles were used.

Economic Work

Economic research received additional support under Henry C. Wallace, becoming an important tool in the development of an agricultural relief policy. In 1922, a world survey of agricultural conditions was inaugurated, and in the following year a comprehensive study of land utilization and farm organization was begun. W. J. Spillman's bulletin on the distribution of types of farming in the United States, published in 1923, marked the institution of a broader type of farm management research.

Economic service activities entered new areas during Wallace's term of office. On March 4, 1921, President Wilson had approved an act authorizing the Federal Government to take over the Center Market building and facilities in Washington, D.C.²⁹ The Department of Agriculture began operation of the market, on April 1, 1922, as a laboratory for the city marketing work of the Bureau of Markets and Crop Estimates. This was continued until 1930, when the market was closed preparatory to clearing the site for the construction of the National Archives Building (249, 1924, pp. 39-40).

Soon after the creation of the Bureau of Agricultural Economics in 1922, a movement got underway to make available to farmers the results of economic research to aid them in planning production and marketing for the coming year. The situation was analyzed in the light of economic conditions expected during the coming year so as to make this information as useful as possible. The first outlook conference of the Department was held April 20 and 21, 1923, and was followed by another on July 11 and 12 in the same year. Annual conferences have been held since then (60; 316, pp. 2-4).

Authority to regulate certain aspects of marketing was expanded within the Bureau of Agricultural Economics. On February 23, 1923, the United States Warehouse Act was amended to define the type of agricultural products considered storable.³⁰ Federal standards for rye were promulgated effective July 1, 1923. The United States Cotton Standards Act, enacted March 4, 1923, directed the promulgation of standards for use in the classification of cotton, authorized the negotiation of agreements with foreign associations for the use of the official cotton standards, and provided for the use of the standards in classification and price quotation of cotton by the Department of Agriculture and the licensing of non-Government cotton classers.³¹ On June 11, 1923, representatives of the leading European cotton exchanges met in Washington and adopted the United States standards as modified. The regulations of the Secretary under the act were promulgated July 21, 1923, and became effective August 1, 1923 (250).

Appointment of a committee to study land utilization was announced September 30, 1923. Under the chairmanship of L. C. Gray, the committee study was to include (1) present crop production, home consumption, foreign demand, and the relation of land under production to future demands; and (2) a careful survey

and classification of land which could be brought under cultivation in the future (307, *Oct. 12, 1921*; 92).

Studies of various proposals to relieve the agricultural depression of the 1920's became an important aspect of the economic work of the Department. Economists and statisticians of the Bureau of Agricultural Economics cooperated with other bureaus and offices in carefully analyzing proposals, drafting reports on bills introduced in Congress, testifying before congressional committees, and working with various organizations concerned with the problem.

The Department Sponsors the Graduate School

Agricultural economists also took an active part in the organization of the Graduate School. The growth of graduate instruction in agricultural colleges during the second decade of the present century, combined with wartime conditions, led to discontinuation, after 1916, of the summer graduate school of agriculture. This had been held on various college campuses under the joint sponsorship of the Department and the Association of American Agricultural Colleges and Experiment Stations. After hostilities ended, many employees, including scientifically trained men, left the Department for better paying positions or for college positions in which they could continue their education. Under such conditions, employment in the Department was becoming less attractive to young scientists. When the Congressional Joint Commission on Reclassification of Salaries made its report in 1920, it stated the need for some remedial action (273, *pp. 101-102*).

In the year following, the Department sponsored establishment of the United States Department of Agriculture Graduate School. E. D. Ball was active in the early work. A committee, composed of representatives of the bureaus, drew up a plan which was submitted to a large number of colleges, and this Henry C. Wallace approved. The first courses began October 17, 1921, and Ball, who had become Director of Scientific Work, combined this position with that of Director of the Graduate School, a practice that was to be continued for a number of years.³²

Relief Activities

Russian Relief

Need for relief continued to be urgent in Russia and the Near East after the immediate problems at the end of World War I had

been met. The American Relief Administration, a nongovernmental organization headed by Herbert Hoover, met the need with the assistance of the United States Grain Corporation, military forces, and local governments. Difficulties increased with a crop failure, in 1921, caused by a drought in the Volga Valley. The Russian Relief Act, approved December 22, 1921, appropriated \$20 million for the purchase of corn, seed grain, and preserved milk for distribution to the starving people of Russia.³³ President Harding established the Purchasing Commission for Russian Relief by Executive Order 3601, December 24, 1921. Supplies were purchased in this country, moving surplus agricultural commodities (215, pp. 420-422).

Seed-Grain Loans

During the spring of 1921, \$2 million became available for seed-grain loans, under the Appropriation Act approved March 3, 1921. On March 9, 1921, Secretary Wallace placed Leon Estabrook, Chief of the Bureau of Crop Estimates and Assistant to the Secretary, in general charge of the work, and appointed a seed-loan committee with Estabrook as chairman to draw up regulations, instructions, and forms for the operation. He placed C. W. Warburton, an agronomist in the Bureau of Plant Industry, in charge of field-work. Loans were made in Montana, North Dakota, Idaho, and Washington.³⁴ When the drought continued the next year, \$1.5 million was appropriated for similar loans and the crop failure area was expanded to include South Dakota. In 1924, \$1 million was appropriated for feed and seed loans in New Mexico for the relief of drought-stricken farmers.³⁵

Secretary Wallace and Agricultural Relief

During World War I, farmers had been encouraged to produce the maximum to meet the requirements of domestic consumers and of the Allied Powers. Following the cessation of hostilities, the increased production met relief needs in Europe and the Middle East. But decrease in credit from the United States, resumption of normal or even increased production by the former belligerents, and reopening of trade channels reduced foreign demand for American agricultural commodities.

Edwin T. Meredith, as Secretary of Agriculture, had pointed out the unsatisfactory status of the American producer. He de-

voted a great deal of attention to making the rest of the population aware of the farmer's precarious position. After the sharp decline in agricultural prices in September 1920, from which agriculture was slow to recover, he worked still harder. Meredith, a Democrat from Iowa, paved the way for Henry C. Wallace, a Republican from the same State.

Henry C. Wallace, as editor of *Wallaces' Farmer* and as one of the leaders of his time, felt a sense of urgency in his new job. In a statement on the agricultural situation shortly after he took office, he said:

We should do everything possible to find an outlet for this great food surplus. We should search for ways to produce more cheaply. Our scientific men should try to find new uses for our surplus crops. We should help develop more efficient marketing systems, straightening curves and lowering the grades between producer and the consumer. . . . We can not hope to reach normal conditions until we arrive on a price level which will be fair to all our people and all products. Farm products must come up in price and other products come down until the normal relation between them has been restored (312, no. 638-21).

In the early days of Wallace's administration, Henry C. Taylor, Chief of the Office of Farm Management and Farm Economics, discussed the farm problem and the responsibility of the Department before a conference of State directors of extension. He said:

A very large per cent of what the farmer can now do to improve his marketing situation consists of adjusting his production to the demands of the market. The rest lies largely in the field of local co-operation. . . . I do wish to give especial emphasis at this time to the idea that the marketing problem, so far as it is a problem of securing a satisfactory price for farm products, is to be solved largely through the adjustment of the supply to the anticipated demand, and must come in large measure from the right direction of production. . . . In this, our role is that of research and education, which will give basis for straight thinking and intelligent action on the part of farmers (307, Mar. 23, 1921).

Cooperative Marketing

By the time Henry C. Wallace came to the Department of Agriculture, cooperative marketing had begun to increase in importance, with the American Farm Bureau Federation, as well as the Farmers Union, promoting the idea. Secretary Wallace was asked to speak at a meeting in Chicago, April 6, 1921, at which a plan for a grain marketing cooperative supported by the American Farm Bureau Federation was presented. On March 28, 1921, he asked a number of his agency heads to brief him on the previous policy of the Department in dealing with cooperatives and to make recommendations for future action. The chiefs told him that they believed it should be of an advisory nature rather than promotional.³⁶

The American Farm Bureau Federation at this time was fostering commodity cooperatives. This program became more intensified when James Howard was succeeded as president by Oscar E. Bradfute, and the federation employed Walton Peteet and Aaron Sapiro to promote cooperatives (78, p. 53). Secretary Wallace had to determine, in a general way, the attitude and official relationship of the Department to the new cooperative organizations.

In his speech, Wallace said:

It is not the business of the Department to organize marketing associations, but it is properly its business to make available the most reliable information it can obtain concerning the organization and operation of such associations (312, no. 705-21).

The Norris Export Corporation

One approach to farm relief was the proposal to establish an export corporation to sell surpluses abroad. One of the earliest such bills was the Norris Export Corporation bill. Senator George W. Norris of Nebraska, who introduced the bill, was assisted in its drafting by Carl Vrooman, a former Assistant Secretary of Agriculture. Introduced on May 31, 1921, it was amended by the substitution of a bill to authorize the War Finance Corporation to extend further credit (204, p. 160; 78, p. 15).

The Farm Bloc

As the 1st session of the 67th Congress neared adjournment, agricultural leaders and Congressmen from agricultural States realized there was a possibility that little legislation for the benefit of the farmer would be passed. Therefore, on May 9, 1921, a meeting was held in the Washington offices of the American Farm Bureau Federation to bring together a bipartisan group of Senators from Southern and Western agricultural States. Representatives from Federal departments and farm organizations also attended the meeting. The group, later known as the Farm Bloc, was organized to promote agricultural legislation. A similar group, but less clearly defined, was organized for the House of Representatives. The two groups, especially the one in the Senate, cooperated in supporting legislation to aid agriculture. Among the bills supported were the amendment to the Federal Reserve Act providing a representative of agriculture on the Federal Reserve Board; the emergency tariff bill which included agricultural products; the grain futures bill; the packers' control bill; the expansion of the War Finance Corporation; and the Capper-Volstead Act. The Farm Bloc Senators called on Secretary of Agriculture Wallace, Secretary of Commerce Hoover, representatives of farm organizations, and others for advice (44).

The Joint Commission of Agricultural Inquiry

About a month after the Senate Farm Bloc organized, the Joint Commission of Agricultural Inquiry was established by Concurrent Resolution 4 of June 7, 1921. The Commission, headed by Senator Sydney Anderson of Minnesota, was to make a general investigation of agricultural conditions and their relationship to the rest of the economy.³⁷ It held hearings, beginning in July, and submitted a four-part report to Congress late in 1921. The Commission stressed legislative reforms to promote orderly marketing, including legalization of cooperatives, provision for intermediate credit, lowering of freight rates, expansion of governmental economic and marketing facilities, and the necessity for restoring a fair price relationship between agricultural and other commodities (272).

National Agricultural Conference

Preceding the presidential election of 1920, there had been talk of calling a conference to discuss the agricultural situation. In May 1921, Secretary Wallace renewed his suggestion made to Harding during the campaign. In December 1921, the President approved the calling of a conference to survey the situation and make recommendations for future action. The Secretary invited leading farmers, and representatives of farm organizations, State agencies, agricultural colleges, the agricultural press, and the business groups with whom producers dealt.

President Harding opened the conference on January 23, 1922. In his address, he said:

This conference would do the most lasting good if it would find ways to impress the great mass of farmers to avail themselves of the best methods. . . . In the last analysis, legislation can do little more than give the farmer the chance to organize and help himself (160, p. 10).

The conference, under the leadership of Senator Sydney Anderson of Minnesota, was held January 23-27, 1922. It was organized into 12 committees, with Department of Agriculture specialists acting as secretaries. The committees studied such problems as agriculture and price relations; agricultural credit, insurance, and taxation; transportation; costs, prices, and readjustments; crop and market statistics; marketing of farm products; agricultural research and education; national forest policy; national land policy; farm population and the farm home; and coordination of State and Federal legislation.

The report, transmitted to the President by Wallace on February 6, 1922, contained a general survey of the recommendations adopted by the committees, including the need for short-term agricultural credit, agricultural representation on the Federal Reserve Board, efficiency in production, diversification, adjustment of pro-

duction to market demand, and the reestablishment of fair exchange value for farm products (160, pp. 185-186).

Equality for Agriculture

In 1921, George Peek, president of the Moline Plow Co., outlined his ideas for giving agriculture equality with the rest of the economy in a letter to James Howard, president of the American Farm Bureau Federation. This served as the basis for an unsigned circular, "Equality for Agriculture," ready for distribution in December 1921. Copies were circulated before the National Agricultural Conference was held. A second edition, signed by Peek and Hugh Johnson, his associate at Moline, came out in March 1922 (78, pp. 38-58). This included a series of charts on agricultural prices prepared by O. C. Stine, at the request of Peek and Johnson. Stine at that time was in the Office of Farm Management and Farm Economics. Included as an appendix, Stine's charts showed what the monthly prices of wheat, corn, hogs, and cotton would have been from January 1921 through January 1922, if they bore the same ratio to prewar prices (1905-14) that general index numbers of the then current wholesale prices bore to prewar prices.

The Secretary invited Peek to attend the National Agricultural Conference, and just before the sessions began, Johnson called on Herbert Hoover, Secretary of Commerce, to discuss the plan. Hoover disapproved of it. The same day, Peek and Johnson called on Secretary Wallace. Wallace had not read the brief of the plan and was afraid that if the ratio-price idea were presented at the meeting, there would be no general discussion of agricultural conditions. Peek and Johnson tried to meet H. C. Taylor, but he was too busy with conference arrangements to see them.

After the meetings began, Peek had difficulty in presenting his ideas. After he discussed the principles of equality for agriculture in the committee on marketing, to which he had been assigned, he was informed that the plan was within the scope of the subcommittee on price fixing. The subcommittee denied him a hearing. After Peek discussed his problem with Henry C. Taylor, he arranged for Peek to speak before the committee on agricultural price relations. Here the man from Moline discussed his proposal. That evening he attended the general session of the committee on marketing where he managed to have included in the committee's final report:

It is the sense of this committee that the Congress and the President of the United States should take such steps as will immediately reestablish a fair exchange value for all farm products with that of all other commodities (160, p. 171).

When Peek and Johnson talked with Secretary Henry C. Wallace on the day following the conference, January 28, 1922, they asked him to call together a small group of competent critics to consider

the practicability of their plan. Wallace, however, wanted his economists to analyze the proposal first. Taylor and G. F. Warren, consulting specialist in the Bureau of Markets and Crop Estimates, made their statement to the Secretary on February 5, 1922. They concluded that "some plan of this kind must be added to the tariff idea in order to make the tariff effective in holding up the prices of products." ³⁸

Wallace called a small conference on February 13, 1922, to discuss the plan. Those present included Julius H. Barnes, President of the United States Grain Corporation; Charles G. Dawes, Director of the Budget, then in the Treasury Department; James R. Howard and Gray Silver from the American Farm Bureau Federation; Otto Kahn of Kuhn, Loeb & Co.; Fred Lingham, Lockport Milling Co., Lockport, N.Y.; George McFadden, cotton exporter from Philadelphia; Frederick B. Wells, grain dealer from Minneapolis; and Thomas Wilson, American Institute of Meat Packers of Chicago. After Peek and Johnson presented their ideas, Secretary Wallace and James Howard expressed their general agreement, but they warned that "Any price fixing plan which does not control production is a purposely hopeless effort." ³⁹ Several of the others attending the meeting did not approve the plan.

Thus the matter stood after this small conference. While President Howard of the American Farm Bureau Federation favored the plan, he did not commit his organization to it. The federation was in the midst of a campaign to promote commodity cooperatives, as advocated by Aaron Sapiro. Moreover, in December 1922, Howard was succeeded by Oscar Bradfute, who preferred the cooperative marketing approach to farmers' problems (78, p. 53). Unable to interest other national farm organizations in participating in his crusade for equality for agriculture, Peek carried on his campaign independently.

The situation continued to be critical in the Northwestern wheat States. On September 18, 1922, the Secretary wrote to his son, Henry A. Wallace, ". . . we should cut down production to our own needs, or a little more." ⁴⁰ In a speech at Washington Court House, Ohio, on October 19, 1922, he repeated the statement he had made at the conference on February 13, 1922.

Although the Peek-Johnson plan, later incorporated in the McNary-Haugen bill, received considerable attention in the Department, other proposals were studied. The Secretary made reports to Congress on his opinion of bills introduced in Congress. He received many suggestions for the alleviation of the farm situation, which he referred to the economists for analysis or to special committees.

In June 1923, Henry C. Wallace joined President Harding and other Cabinet members on a trip to the Northwest and Alaska. On his return to Washington following the death of the President on August 2, 1923, the Secretary resumed his interest in the Peek plan. But by then Calvin Coolidge had succeeded Harding in the White House.

When Secretary Wallace reported on the wheat situation at a Cabinet meeting on September 25, 1923, he said, that in view of the policies followed by the Government during the war and post-war period, it had

. . . very direct responsibilities to the farmer and should do everything it properly can to restore normal relationships between agriculture, industry, commerce and labor. Attention must be given to [the] condition of agriculture as a whole. . . . The real problem is to reestablish fair ratios between agriculture and other things (312, no. 271-24).

The following day Wallace asked William M. Williams, the Solicitor of the Department, to study the feature of the Peek-Johnson plan involving "the levy and collection . . . of an assessment on all wheat for the purpose of financing the corporation." Williams told the Secretary he thought the plan probably would be unconstitutional unless it was altered to have the Government conduct the operation.⁴¹

Henry C. Taylor, Chief of the Bureau of Agricultural Economics, in September 1923, wrote that export dumping was the only method thus far proposed that would reestablish the prewar ratio between prices of farm products and other commodities. Early in October, Wallace sent him on a tour of the Northwest to get firsthand information on farmers' attitudes. At about the same time, President Coolidge sent Eugene Meyer and Frank Mondell, Directors of the War Finance Corporation, on a mission through the same territory. On Taylor's return, he reported overwhelming interest in the export corporation plan. Meyer and Mondell likewise acknowledged the strength of the export corporation movement, but recommended the cooperative marketing approach for the relief of the farmer.

Wallace publicly supported the Peek plan in his report of November 30, 1923, to the President on the wheat situation. He concluded by saying:

. . . the suggestion that the Government set up an export corporation to aid in the disposition of this surplus is worthy of the most careful consideration. Such a corporation necessarily would need rather broad powers. It would not be necessary that it should undertake to handle the entire crop, and it could probably carry on its activities in cooperation with existing private agencies. If it should be found necessary to arrange for the sale of the surplus exported at a price much lower than the domestic price, the loss so incurred would properly be distributed over the entire crop.

The prime duty of such an export corporation would be to restore, so far as possible, the pre-war ratio between wheat, and other farm products of which we export a surplus, and other commodities. Its activities would therefore expand or contract according as the relative prices for farm products varied with other commodities, and it would cease to function as pre-war ratios become fairly well restored (315, p. 74).

After Charles J. Brand returned from Europe in May 1923, Secretary Wallace asked him to draft legislation to establish a Government surplus disposal corporation. Brand's draft was re-

vised and introduced in Congress on January 16, 1924, by Senator Charles McNary of Oregon and Representative Gilbert Haugen of Iowa (*136, p. 243*).

But on December 6, 1923, President Coolidge had spoken against the policy contained in the bill when he addressed a joint session of Congress:

No complicated scheme of relief, no plan for Government fixing of prices, no resort to the Public Treasury will be of any permanent value in establishing agriculture. Simple and direct methods put into operation by the farmer himself are the only real sources for restoration (*271, Dec. 6, 1923*).

He felt that the natural ways of remedying the situation might include reduction of taxation and freight rates; better farmers' organizations including cooperatives; diversification of production; and Government assistance, through the War Finance Corporation, in the disposition of the exportable surplus. Following this address by President Coolidge, Secretary Wallace ceased his public campaign for the export corporation, but continued privately to lend assistance to the movement (*204, pp. 269, 274-276*).

The American Farm Bureau Federation, in 1923, started its first agitation to put agriculture on an equality with industry. After the McNary-Haugen bill was introduced in Congress, the federation endorsed it. On January 21, 1924, the executive committee met in Chicago and approved the bill, with the suggestion that it be broadened to include the cooperatives. State representatives and representatives of the National Grange, the Farmers Union, and the National Board of Farm Organizations worked closely with the legislative representatives of the American Farm Bureau Federation (*17, Jan. 24, May 22, 1924*).

President Coolidge called a conference on Northwestern agriculture and finance. At this meeting, held in Washington, on February 4, 1924, and attended by business and farm leaders with financiers and Government officials, Secretary Wallace was a bystander. The conference recommended that increased loans from private sources and the Intermediate Credit Banks be available to banks in the Northwest.

Peter Norbeck, Senator from South Dakota, announced on May 8, 1924, that he would introduce the McNary-Haugen bill as a rider to the Mellon tax reduction measure. House and Senate leaders promised action before the session ended. On June 3, the McNary-Haugen bill was defeated in the House of Representatives by a vote of 223 to 155 (*77, pp. 108-110*).

Even before the bill was defeated, plans were underway for the formation of an organization to carry on the campaign. On July 11 and 12, 1924, representatives of most of the national and mid-western farm organizations met in St. Paul. The American Council of Agriculture was organized, with George Peek as president. After that he directed the campaign (*123, pp. 131-132*).

By the fall of 1924, agricultural prices had improved. In his statement on October 3, 1924, "The Condition of Agriculture Im-

proved," Henry C. Wallace said that American agriculture was in the best position it had been since 1920. While the relative position of agriculture had changed with the increased purchasing power, it still had not reached equality with industry. He continued:

. . . the city dweller should not hastily dismiss the agricultural problem as solved, but should bear in mind the continuing effects of the recent tremendous economic crisis and should recognize that his own interest as well as that of the farmer demands his sympathetic support of all sound measures for agricultural betterment.

Secretary Wallace continued to support the McNary-Haugen movement. After the first bill was defeated, the Department worked on a new one. Shortly before his death, on October 25, 1924, Wallace conferred with Henry C. Taylor and Charles J. Brand on the new draft.

The death of the third Secretary of Agriculture from Iowa was "an entirely unexpected shock which shook the campaign for farm relief to its very foundations. The farmers . . . had lost their last line of contact with government" (78, p. 106).

Early in the summer of 1924, Secretary Wallace had decided to write down some of his ideas. Asking Nils Olsen of the Bureau of Agricultural Economics to help him, the Secretary started writing a book explaining the agricultural situation and the duty of the Government to alleviate the depression. *Our Debt and Duty to the Farmer* was finished by his son, Henry A. Wallace, and Nils Olsen, and published in 1925. In the final chapter, the son of Secretary Henry C. Wallace wrote:

The men of vision must arise soon if the United States is to be saved from the fate of becoming a preponderantly industrial nation in which there is not a relation of equality between agriculture and industry. They must act in the faith that it will be good for the entire Nation if agriculture from henceforth advances on terms of absolute equality with industry. They must ever keep before the mind of the Nation the long-time point of view both materially and spiritually. They must set the minds of farmers on fire with the desire for a rural civilization carrying sufficient economic satisfaction, beauty and culture to offset completely the lure of the city (371, p. 231).

Howard M. Gore as Secretary

Following the death of Henry C. Wallace on October 25, 1924, Howard M. Gore, endorsed by the American Farm Bureau Federation, became Acting Secretary of Agriculture. He was formally appointed Secretary on November 22, 1924, the first Assistant Secretary to succeed to the position. Prior to his appointment as Assistant Secretary on September 17, 1923, Gore had served as a specialist in marketing in the Packers and Stockyards Administration and as a businessman and breeder of fine cattle and hogs. He served until March 4, 1925, when he became Governor of West

Virginia.⁴² In effect, his was only an interim appointment, filling out the term of Henry C. Wallace.

The President's Agricultural Conference

Calvin Coolidge was elected President on November 4, 1924, and both Houses of Congress remained under Republican control. Three days later, Coolidge appointed a nine-man President's Agricultural Conference to study the question of farm legislation, with Robert D. Carey, Governor of Wyoming, designated chairman. Other members were O. E. Bradfute, American Farm Bureau Federation; C. S. Barrett, Farmers Union; Louis J. Taber, master of the National Grange; Ralph Merritt, president of Sun-Maid Raisin Growers; R. W. Thatcher, director of the New York Experiment Station; W. C. Coggey, dean of the College of Agriculture and director of the Minnesota Experiment Station; Fred H. Bixby, president of the American Livestock Association; and William M. Jardine, president of Kansas State College, who was to become the next Secretary of Agriculture.⁴³

The conference began late in 1924. Early the following year it reported to the President on the livestock situation, on legislation needed, and on the activities of various departments and agencies having a bearing on agriculture. Its recommendations included a more liberal credit policy, the leasing of grazing lands in the public domain, additional tariff duties, the promotion of cooperative marketing, the adjustment of freight rates, and Federal aid to experiment stations to permit them to conduct research in agricultural economics, rural social problems, and home economics (*312, nos. 576-25, 620-25, 628-25*).

These recommendations were to be left to the new Congress and the new Secretary of Agriculture. The farm problem had not been solved, but, in the 4 years from 1921 to 1925, a number of notable regulatory acts had been passed by the Congress, and a notable economic research agency, the Bureau of Agricultural Economics, had been established.

¹ E. T. Meredith to Henry C. Wallace, June 18, 1920, Secretary's Correspondence, USDA, National Archives.

² Christianson, Alice, *Agricultural Pressure and Government Response in the United States*, Ph. D. Dissertation, University of California, 1937, pp. 190-191.

³ Christianson, *Agricultural Pressure and Government Response*, pp. 6-7, 22, 39.

⁴ 41 Stat. 1084.

⁵ Christianson, *Agricultural Pressure and Government Response*, p. 47.

⁶ Memorandum to the Secretary from Leon Estabrook, H. C. Taylor, E. R. Flint, acting for Dr. Allin, Apr. 1, 1920, Secretary's Correspondence, USDA, National Archives.

⁷ Memorandum from Leon Estabrook and George Livingston, Sept. 17, 1920, Secretary's Correspondence, USDA, National Archives.

⁸ 41 Stat. 1315.

⁹ 41 Stat. 1083.

¹⁰ 41 Stat. 1341.

¹¹ Reports on these conferences are in Secretary's Correspondence, USDA, National Archives.

¹² Memorandum from the Assistant Secretary to the Secretary, Apr. 1, 1921, Secretary's Correspondence, USDA, National Archives.

¹³ 42 Stat. 1488.

¹⁴ 42 Stat. 1315.

¹⁵ 43 Stat. 243.

¹⁶ Memorandum from Leon Estabrook, Associate Chief, Bureau of Markets to Mr. Dillon, Office of Information, June 9, 1921, Secretary's Correspondence, USDA, National Archives.

¹⁷ Report of the Economic Committee, June 18, 1921, Secretary's Correspondence, USDA, National Archives.

¹⁸ 41 Stat. 1341.

¹⁹ U.S. Department of Agriculture, Bureau of Markets and Crop Estimates Memorandum No. 213, July 9, 1921.

²⁰ 42 Stat. 531.

²¹ Charles J. Brand Plan (Aug. 21, 1923), Secretary's Correspondence, USDA, National Archives.

²² 26 Stat. 209; 38 Stat. 730; 42 Stat. 388.

²³ 38 Stat. 251; 39 Stat. 360; 42 Stat. 620; 42 Stat. 1454.

²⁴ 42 Stat. 159.

²⁵ Memorandum from W. A. Jump to P. L. Gladmon, Sept. 24, 1921; Memorandum from Chester Morrill to the Secretary, Sept. 30, 1921, Secretary's Correspondence, USDA, National Archives.

²⁶ 42 Stat. 187; 42 Stat. 998.

²⁷ 36 Stat. 961; 43 Stat. 653.

²⁸ Letter from A. D. Davis, secretary-treasurer, Farmers Educational and Cooperative Union, Aug. 24, 1922, Secretary's Correspondence, USDA, National Archives.

²⁹ 41 Stat. 1441; 46 Stat. 523.

³⁰ 42 Stat. 1282.

³¹ E. J. Overby, Standards for United States Cotton, Address at the 6th Conference on Standards, Washington, D.C., Oct. 26, 1955; 42 Stat. 1517.

³² Plan for Graduate Study, [Aug. 30, 1921] Secretary's Correspondence, USDA, National Archives; B. R. Stauber, A Few Highlights on Graduate School History, Address before the United States Department of Agriculture Graduate School Dinner, Sept. 6, 1961.

³³ 42 Stat. 351.

³⁴ 41 Stat. 1347.

³⁵ 42 Stat. 467; 43 Stat. 110.

³⁶ Memorandums from the Secretary to heads of agencies, Mar. 28, 1921, and their replies, Mar. 29-30, 1921, Secretary's Correspondence, USDA, National Archives.

³⁷ 42 Stat. 1807.

³⁸ H. C. Taylor to the Secretary, Feb. 3, 1922, Secretary's Correspondence, USDA, National Archives.

³⁹ USDA, Conference called by Secretary Wallace, Monday, Feb. 13, 1922, to Consider Means of Establishing a Fair Ratio of Exchange Between Farm Products and Other Products, typewritten copy (in USDA Library), p. 34.

⁴⁰ Henry C. Wallace to Henry A. Wallace, Sept. 18, 1922, Personal Letter Book, USDA.

⁴¹ William M. Williams to the Secretary, Sept. 28, 1923, Secretary's Correspondence, USDA, National Archives.

⁴² Personnel Folder of Howard M. Gore, USDA, Federal Records Center, St. Louis, Missouri.

⁴³ Christianson, Agricultural Pressure and Government Response pp. 172-173.

The Department In Transition, 1925-1933

It was raining in Washington on March 5, 1925, when William M. Jardine was sworn in as Secretary of Agriculture. The preceding day, Calvin Coolidge had taken the oath of office as President under sunny skies. The stock market closed firm on March 5. The American Locomotive Co. increased its dividend, voted an extra \$10 a share, and reached a new high on the New York Stock Exchange. Yet the same page of the Washington, D.C., newspaper which carried the stock market story carried a headline, "General Setback in Wheat Market," and a subhead that prices took a "sharp tumble." Cotton also was down. Symbolically, the weather was sunny for business, but cloudy for the farmer.

The new Secretary of Agriculture, William M. Jardine, had most recently served the Government as a member of the President's Agriculture Conference, 1924-25. His opposition to the McNary-Haugen bill was known, as was his firm opposition to price fixing for agricultural products. His support of research, education, and farmers' cooperatives was probably the outgrowth of his own experiences, but it fitted in with the national policy for agriculture at the time.

Secretary Jardine was born on an Idaho farm. He worked at several jobs while getting an education at Utah State Agricultural College and at the University of Illinois. Jardine taught agronomy at Utah State for some years and served from 1907 to 1910 in the Department of Agriculture, in charge of dryland grain investigations. He then became director of the Kansas State Experiment Station and dean of agriculture at Kansas State College. From 1918 to 1925, Jardine was president of Kansas State College.

Secretary Jardine recommended to President Coolidge that he appoint Renick W. Dunlap as Assistant Secretary. Dunlap took office on April 1, 1925, and served to March 6, 1933. He had been a farmer most of his life, after graduating from the College of Agriculture, Ohio State University, in 1895. He had been the master of his local Grange, a member of the Farm Bureau, a mem-

ber of the Ohio Senate, State Dairy and Food Commissioner of Ohio, and secretary of the State board of agriculture. He was in sympathy with Secretary Jardine's approach to farm problems.

Coordination and Reorganization

Shortly before he was sworn in as Secretary of Agriculture, William M. Jardine stated his objectives as follows:

I shall co-ordinate the activities of the different bureaus and insist upon their support of the general plan. I shall endeavor to enlist the aid of other government departments and shall seek the support of business and industrial groups throughout the nation.

The wheels of industry must be kept moving that labor may be fully employed, that it may buy more of the farmers' products. The three groups are interdependent. But industry and business do not fully appreciate their responsibilities to agriculture (25).

On April 7, 1925, Secretary Jardine consolidated a number of small units attached to the Office of the Secretary into an Office of Personnel and Business Administration (306, no. 530). The Director of the new Office was made responsible for personnel administration, budget, fiscal and accounting matters, purchasing of supplies and equipment, traffic, housing, and related matters. The Secretary named Warner W. Stockberger, formerly responsible for personnel classification, as the Director.

Even at this early date, Stockberger had gained a Government-wide reputation in the comparatively new field of personnel administration. The new post to which he was appointed on April 7, 1925, enabled him to bring pioneering concepts to Federal personnel administration. As was written later:

He was instrumental in establishing on a broad and enduring basis the first central personnel agency in an operating department of the federal government. . . . He inaugurated a constructive personnel program specifically aimed at facilitating, rather than controlling, departmental operations (118).

The Assistant Director of the new agency, William A. Jump, continued to serve as Budget Officer of the Department. Like Stockberger, he was to influence governmental operations. In later years, as Director of Budget and Finance, Jump became a key figure in the Department whose major concern was "a policy-oriented allocation of financial resources among public programs." As a leading political scientist said of Jump: "He played a major role in creating the modern view of the budget and of the budget official in governmental administration" (363).

A second consolidation became effective May 1, 1925, when the Office of Information, headed by a Director of Information, was established. The first Director was Nelson A. Crawford, formerly

head of the Industrial Journalism Department of Kansas State College. He was to "have general direction and supervision of all the publication and other informational policies and activities of the Department" (306, no. 528).

Crawford called Samuel Pickard to the Department to fill the newly created position of Chief of Radio Service in the Office of Information. Pickard had pioneered in educational radio with a "School of the Air" at Kansas State College, under Jardine. The Department had been releasing crop and market news to radio stations since early in 1921, but beginning in 1926, a much broader series of farm radio programs was undertaken. In 1930, Milton S. Eisenhower, then Director of Information; Morse Salisbury, who had succeeded Pickard as Chief of Radio Service; and Josephine Hemphill inaugurated the program which represented the Department to radio listeners for many years, the "National Farm and Home Hour."¹

A number of changes were made in the Department's bureaus to separate research from regulatory functions. The Food, Drug, and Insecticide Administration as a law-enforcement agency and the Bureau of Chemistry and Soils as a research agency were established on July 1, 1927, while the Insecticide and Fungicide Board was abolished June 30, 1927. The new Food, Drug, and Insecticide Administration was given responsibility for enforcement of the Food and Drugs Act, Tea Inspection Act, Naval Stores Act, and Insecticide Act. It was later charged with the Import Milk Act and Caustic Poison Act. The Director of Regulatory Work, W. G. Campbell, also served as head of the Food, Drug, and Insecticide Administration (306, no. 569). He continued with the dual responsibility until January 30, 1933, when, upon his request, he was relieved of the responsibility for regulatory work. The position of Director of Regulatory Work was abolished at that time (306, no. 632).

The Bureau of Chemistry and Soils was responsible for the research work formerly carried on by the Bureau of Chemistry, the Bureau of Soils, the Fixed Nitrogen Research Laboratory, and the Divisions of Soil Fertility and Soil Bacteriology of the Bureau of Plant Industry.

The Packers and Stockyards Administration was abolished and its responsibilities were assigned to the Bureau of Animal Industry effective July 1, 1927. This change was made to bring all livestock regulatory work under one agency.

A similar goal for plants led to the establishment of the Plant Quarantine and Control Administration on July 1, 1928. The new Administration was responsible for the work formerly assigned to the Federal Horticultural Board, which was abolished, and for plant regulatory work formerly carried on by the Bureaus of Entomology and Plant Industry.

These actions were taken to bring about a closer coordination of work and a division of responsibilities according to Secretary

Jardine's ideas. Other actions expressed the Secretary's belief in the usefulness of research, information, and cooperatives as solutions to farm problems.

Just before Secretary Jardine took office, Congress passed the Purnell Act of February 24, 1925.² In accordance with a recommendation of the National Agricultural Conference, the new law authorized the expenditure of funds for economic, sociological, and home economics research by the State experiment stations. Research under this act began during Secretary Jardine's administration. These projects offered farmers, or, perhaps more correctly stated, county agents and others working with farmers, new insights into economic and social problems in particular States. They also provided much basic material for broader analyses of problems common to the farmers of many States.

Service to Cooperatives

A year after the Purnell Act became effective, Congress, by the Cooperative Marketing Act of July 2, 1926, created a Division of Cooperative Marketing in the Bureau of Agricultural Economics.³ It replaced an earlier Division of Agricultural Cooperation. The new Division, headed by Chris L. Christensen, was to render research, advisory service, and educational assistance to associations of producers of agricultural products engaged in the cooperative marketing of agricultural products, the cooperative purchasing of farm supplies, and other cooperative activities. The Division was not only to acquire, analyze, and disseminate information; it was also to advise groups of producers interested in forming cooperatives.

Secretary Jardine believed that cooperatives offered farmers an effective means for dealing with the surplus problem. He had given farm leaders sympathetic and aggressive cooperation in securing passage of the Cooperative Marketing Act. In his report for 1926, he stated:

Farmers can unquestionably exercise effective bargaining power through commodity organizations representing a majority of the heavy producers of the crops handled by the organizations. In that way they can prevent disastrous ups and downs in prices, cause a steady flow of products to the best markets, and exert some influence on production. It is important that farmers' organizations should not confine their work merely to regulating the flow of agricultural products to market. They should seek to adjust production as well as marketing to consumption requirements.

In the early 1920's, a number of commodity associations operating over extended areas had been organized. By 1925, there were about 74 such organizations with 880,000 members. Other cooperatives had been established with the support and encourage-

ment of the National Grange, the National Farmers Union, and the American Farm Bureau Federation.

The American Institute of Cooperation was incorporated on January 22, 1925, and began holding educational conferences and sessions the same year. It disseminated information and encouraged research and educational activities. In 1929, the National Chamber of Agricultural Cooperatives, better known under its later name of National Council of Farmer Cooperatives, was established to promote the interests of farmer cooperatives (333).

In his last report as Secretary, Jardine was still hopeful that cooperative marketing would solve some of the farmers' problems, though recognizing: "When markets are depressed by overproduction, it is difficult even for the most efficient cooperative organization to obtain satisfactory prices." The Division of Cooperative Marketing could report that "Greater progress in cooperative organization among farmers has been made during the last 10 years than during any other period in American agriculture."

Forestry Legislation

On June 7, 1924, Congress, by the Clarke-McNary law, had authorized a reforestation program to be carried out cooperatively by the Department and the States.⁴ Farmers were to be assisted in growing timber crops, windbreaks, and shelterbelts. Responsibility within the Department was assigned to the Forest Service and the Extension Service on May 25, 1925. The Forest Service was responsible for cooperative work with the States in fire prevention and suppression, studies of forest taxation and timber insurance, and the distribution of forest planting stock. The Extension Service was responsible for assisting farmers with forestry work in cooperation with the States (306, no. 537).

Another major step in forestry came on May 22, 1928, when the McSweeney-McNary Act became law.⁵ This act authorized a broad program of forest research to

. . . insure adequate supplies of timber and other forest products . . . to promote the full use for timber growing and other purposes of forest lands in the United States, including farm woodlots and those abandoned areas not suitable for agricultural production, and to secure the correlation and the most economical conduct of forest research. . . .

The law authorized a nationwide survey of forest resources, and in 1930 the Forest Service began the first complete survey ever undertaken of forest resources and conditions on the Nation's 648 million acres of forest land. Secretary Jardine said that the act

. . . authorized the inauguration of a far-reaching program of Federal research in forestry which for the first time affords the prospect that

the basic knowledge essential for skillful timber growing will be progressively obtained at a rate commensurate with its importance.

This statement was prophetic in assessing the future importance of forestry research to all aspects of forest management.

The Building Program

A problem that had plagued Department workers from Secretaries of Agriculture to messengers for many years came nearer solution on July 3, 1926, with formal authorization of the construction of the central portion of the Administration Building, at a cost not to exceed \$2 million, and the construction of other office space.⁶ Secretary Jardine had appointed the Committee on Housing Program, April 15, 1925. Headed by Assistant Secretary Dunlap, the Committee included representatives of six departmental agencies. The Committee was directed to consider various plans proposed by the Treasury Department for alleviating the housing problems of the Department (306, no. 531). The recommendations of the Committee were considered by the Treasury Department and Congress, and, in the Public Buildings Act of May 25, 1926, a program for solving the Department's acute housing problem was approved.⁷

Actual construction of the central portion of the Administration Building began in 1928, and the building was completed in March 1930. The building was greeted with enthusiasm. A construction engineer in the Department of the Treasury stated:

The central structure of the New Department of Agriculture Building is the most beautiful edifice of any kind in the world. It has the most correct proportions and best setting of any building in the world.

By the act of May 25, 1926, Congress also authorized construction of the South Building and the Cotton Annex. The Cotton Annex was erected to provide space equivalent to the Old Economics Building, torn down to make way for the Bureau of Engraving Annex. The Cotton Annex, at the southeast corner of C and 12th Streets SW., was completed in March 1937.

The South Building was the basic answer to the need for additional, consolidated office space. Construction began June 1, 1930, and the entire building was completed January 15, 1937. The \$10 million structure contained 4,292 rooms, with a total floorspace of 1,335,522 square feet.⁸

The office space assigned to the Secretary in the new section of the Administration Building was first occupied, after its completion, by Arthur M. Hyde, who succeeded William M. Jardine as Secretary on March 6, 1929. Farm policy had been an issue in the election of 1928, and Hyde had supported the idea of a Federal

Farm Board working through cooperative groups as opposed to more direct farm relief such the McNary-Haugen proposals.

Secretary Arthur M. Hyde

Arthur M. Hyde was born in Princeton, Mo. He graduated from the University of Michigan in 1899, and obtained a law degree from the University of Iowa in 1900. Hyde engaged in the practice of law, was active in the insurance business, had farm and lumber interests, and was owner of an automobile distribution agency. He was elected Governor of Missouri in 1920, and in that position promoted improved rural education, provided for the wider dissemination of technical information among farmers, and carried on a vigorous road improvement program.

When Secretary Hyde took office, many people hoped that the prevalent general prosperity would, with minimum help by the Government, soon lift the farmers out of their economic slump. Instead, the fall of 1929 saw the beginning of the Great Depression during which the entire national economy was to be gravely affected, and the agricultural segment carried close to disaster. As Secretary Hyde said in his annual report for 1932:

The current depression has caused greater shrinkage in demand for farm commodities, in farm-commodity prices, and in farm incomes than has any similar decline recorded in the last 70 years. . . . Farmers have witnessed a precipitate fall in purchasing power . . . farm-commodity purchasing power was little more than half what it was before the war.

By the same year, 1932, the Secretary reported that over four-fifths of the expenditures of the Department went to the general public rather than to agriculture. Only 10 cents of each dollar expended by the Department was spent or could be spent on its ordinary agricultural activities.

Agricultural Research

Even though funds were limited, the scientific bureaus, the regulatory agencies, and the land use planning and conservation agencies engaged in much useful activity. The goals for research during this period were influenced by the depression, though the findings would be worthwhile at any time. The goals were expressed by Secretary Hyde in his annual report for 1932:

- (1) Reduce costs of production, (2) widen markets and reduce wastes in distribution, (3) discover new uses for farm products and

by-products, (4) adjust production to demand, and (5) improve the quality of farm products.

Mosaic disease of sugarcane was brought under control by scientists of the Bureau of Plant Industry, though not cured or eradicated, by the development and distribution of disease-resistant varieties. The disease, which had been discovered in 1919, had threatened the entire sugarcane industry in Louisiana. A sugarcane exploring expedition to New Guinea in 1928 brought back varieties which, when crossed with other varieties, proved resistant to the disease.

The Bureau of Entomology succeeded in eradicating the Mediterranean fruit fly from Florida in 1930, though this insect posed a constant threat. During 1931 and 1932, farmers in the Great Plains States were faced with an almost unprecedented outbreak of grasshoppers. After the Department was unsuccessful in obtaining a supplemental congressional appropriation to fight the outbreak, the Secretary wrote the Governors of the Western States in May 1932, urging them to take every control action possible. The Bureau of Entomology gave all the assistance possible within its limited budget. In some areas destruction was widespread; in others, poison bait and favorable weather helped control the infestation (261, 1932).

In 1927, Leland O. Howard retired—he had headed the Department's entomological work since 1894. He provided strong research leadership, but, even more, he educated the American public to the dangers of insects and led in the development of control methods. Howard was succeeded by Charles L. Marlatt, who was responsible for administering the Plant Quarantine Act of 1912 through the Federal Horticultural Board.

This coincidence of interests and responsibilities led the Department's entomologists to become aware of the possibilities for both good and evil in the airplane insofar as it affected insect control. The first known agricultural use of an airplane came in 1918, when poison dust was dumped over the side in an attempt to exterminate the pink bollworm in cotton fields. In 1921, a specially equipped Curtiss biplane demonstrated its effectiveness in controlling an infestation of the catalpa sphinx near Dayton, Ohio (151).

The following year, the Bureau of Entomology successfully used airplanes for dusting cotton fields in Louisiana to control the boll weevil. These demonstrations led to the commercial use of aircraft for insect control. In the early years dusts were used almost entirely in aerial insect control. In 1924, Paris green dust was applied by an airplane in Louisiana for control of the *Anopheles* mosquito, the carrier of malaria. Sprays were applied from a plane in 1930 for mosquito control, but were not widely used until the outbreak of World War II. Airplanes were used experimentally in 1932 for distributing wet poison baits in grasshopper control efforts.

The battle against insects was aided by airplanes, but they also

offered insects a new means of travel from State to State and nation to nation. In 1927, the first regularly scheduled international airplane service was established between Florida and Cuba, and the air age had arrived in plant quarantine and insect control work. The next year, the *Graf Zeppelin* arrived from Germany with insect-infested plant material, the first violation of the plant pest quarantine found on aircraft.

Keeping plant and animal diseases and pests out of the United States was a major task. Sometimes, as in the case of foot-and-mouth disease, the wall was breached. This disease was discovered in California in February 1924. It had probably started in hogs fed raw garbage from vessels carrying meat stores obtained in countries where the disease was epizootic.

The Bureau of Animal Industry under the leadership of John R. Mohler, with the cooperation of the State of California, moved to eradicate the disease. Its program was to destroy infected and exposed animals, disinfect the premises, and test by bringing in new animals. Owners were compensated by the Federal Government and the State. The Bureau's veterinarians had the additional problem of combating rumors which exaggerated the extent both of the outbreak and the slaughter program.

The last infection among domestic animals in California was found on April 5, 1925. During the campaign, 8,522 cattle, 3,404 sheep, 199 swine, and 572 goats were slaughtered in California.

In spite of all precautions that could be taken, deer in Stanislaus National Forest contracted the disease from infected cattle with which they mingled. The first infected deer was found July 12, 1924. Eradicating foot-and-mouth disease in deer in the mountainous range was a new and difficult problem. A force was immediately organized to wage a campaign of extermination against deer in the infected area. The State department of agriculture, the California Fish and Game Commission, and the Bureau of Biological Survey and the Forest Service of the Department cooperated with the Bureau of Animal Industry. Leadership in the field operations was delegated to the Bureau of Biological Survey. The intensive and relentless campaign was successful. The last deer showing evidence of infection was killed June 10, 1925. The number of deer taken was 20,698.

An outbreak of foot-and-mouth disease in Texas was confirmed September 27, 1924. The infection first appeared in a herd of Zebu cattle south of Houston, and apparently had no connection with the California outbreak. The work of eradication was prosecuted vigorously by the usual methods. The last diseased herd was discovered October 27, 1924. A total of 8,473 cattle, 27 sheep, and 69 swine were slaughtered in suppressing the outbreak in Texas.

The Chief of the Bureau of Animal Industry was able to report in 1926 that the United States was again entirely free of foot-and-mouth disease and that the last of the quarantine restrictions had

been withdrawn. In 1929 a limited outbreak occurred among hogs in California, but it was eradicated almost immediately by the slaughter and burial of the infected and exposed animals (260, 1924-26, 1929, 1930; 153).

Many less spectacular activities—research into dairy byproducts by the Bureau of Dairy Industry, inspection of meat by the Bureau of Animal Industry, research by the State experiment stations into important problems, the continued advice and assistance to farmers by the county agents—could be mentioned. They were vital to America's food supply and to the well-being of America's farmers even though they did not receive wide public attention.

Marketing, too, continued to receive emphasis. The problem of cotton quality is an example. In 1927, the Department asked Robert W. Webb to get at the fundamentals of the problem. This marked the true beginning of cotton-fiber science in the United States, because Webb, with the help of a staff of scientists, devised methods for determining fiber structures, and developed a systematic understanding of fibers in mass. This work, as Arthur W. Palmer pointed out in the report of the Smithsonian Institution for 1960, led to extensive changes in the methods and practices of the cotton growers and in industry and trade.

Foreign Agricultural Work

During the 1920's the Division of Statistical and Historical Research of the Bureau of Agricultural Economics, headed by O. C. Stine, carried on research work in foreign marketing, first started in 1894. This research was aided by the operation of foreign offices with information which they collected. Congress, on June 5, 1930, authorized the expansion of the work. The Secretary of Agriculture was directed to: (1) Acquire information regarding world competition and demand in agricultural products; (2) investigate farm management and economic phases of agriculture in foreign countries; (3) demonstrate standards for cotton, wheat, and other American products; and (4) appoint representatives of the Bureau of Agricultural Economics as officers of the foreign agricultural service of the United States.⁹ The officers were to be attached, through the Department of State, to the diplomatic missions of the United States, or to the consulates of the United States in the countries where they were stationed. By the end of 1932, officers were stationed in eight foreign countries.

The Division of Foreign Agricultural Service, with Asher Hobson in charge, was established in the Bureau of Agricultural Economics to carry out the provisions of the act. Its aim was to provide a worldwide production and market outlook service for American agriculture. The ultimate goal of this informational

work was to aid agriculture in disposing of its exportable surpluses. At the same time, it was obvious that the farm problem could not be limited to or solved by the United States without knowledge of both production and markets abroad. Since no appropriation was made for expanding the work authorized in 1930, the Federal Farm Board assisted with its financing through fiscal year 1931.

Farm Relief Plans

The Federal Farm Board was President Hoover's answer to continued urging to provide Government financial aid for farmers. Advocates of the McNary-Haugen bill, led by George N. Peek, one of the originators of the plan, and Chester Davis, Montana's commissioner of agriculture, did not give up when Congress rejected their bills in 1926. Instead, with the aid of the Corn Belt Committee of Farm Organizations and the American Council of Agriculture, the proponents of the McNary-Haugen plan secured a favorable vote on their bill in 1927, when southern forces joined the West in its support. It was vetoed by President Calvin Coolidge on February 25, 1927.

Again in 1928, a modified McNary-Haugen bill passed both Houses of Congress. Again, on May 23, 1928, President Coolidge vetoed the bill. Meanwhile, various other ideas were being discussed. The Fess-Tincher bill, for example, introduced into the House of Representatives on April 15, 1926, would have placed the responsibility for removing crop surpluses on cooperative marketing organizations. It embodied the ideas of Secretary Jardine, even though Nils A. Olsen, Assistant Chief of the Bureau of Agricultural Economics, had pointed out that cooperatives could not handle farm surpluses because they did not control commodities in sufficient quantity to exercise a determining factor upon price. The bill was defeated both in the House of Representatives and the Senate (78, p. 160).

At about the same time, the export debenture plan, developed by Charles L. Stewart, an agricultural economist at the University of Illinois, was receiving some attention. In effect, Stewart's plan was an export bounty, even though indirect. It was endorsed by the National Grange and was introduced into Congress, but did not come to a vote.

The domestic allotment plan for farm relief was first presented by Harry N. Owen in his journal, *Farm, Stock and Home*. The plan drew upon ideas supplied by W. J. Spillman of the Bureau of Agricultural Economics. Spillman developed the plan further in a book, *Balancing the Farm Output*, published in January 1927. It was a modification of, and an alternative to, the McNary-Haugen proposal.

The essential principle of the domestic allotment plan was to pay producers a free trade price plus the tariff duty for the part of their crop consumed in the United States, and the free trade price only for that part of the crop exported. The plan was to be carried out by making specific allotments to individual producers of rights to sell on the domestic market their proportionate shares of production needed by that market. The rights were to be transferable. Production not covered by allotment rights might be sold at the world price or used for feed (31).

The plan advocated by the administration, assisting in the organization of marketing cooperatives and attempting to control surpluses by orderly production and marketing, was adopted on June 15, 1929. The Agricultural Marketing Act established a Federal Farm Board to carry out these activities.¹⁰ Its activities are discussed elsewhere in this chapter. Even while the Board was in operation, however, advocates of other plans, particularly the domestic allotment plan, continued to urge additional legislation. The domestic allotment plan was publicized and modified by Beardsley Ruml of the Laura Spelman Rockefeller Memorial Foundation, John D. Black of Harvard University, and M. L. Wilson of Montana State College.

During the winter of 1931-32, M. L. Wilson called the attention of the Federal Farm Board to the plan. The Board brought Wilson to Washington and assigned Mordecai Ezekiel, then a leading staff economist for the Board, to work on the proposal. Others, including Henry I. Harriman, president of the Chamber of Commerce of the United States, and Chester C. Davis, long active in agricultural reform movements, became interested. During 1932, M. L. Wilson became "a veritable evangelist, working with representatives of insurance companies, farm organizations, and others" (369, p. 25). Because of the interest of such men as Senator Peter Norbeck of South Dakota, Representative Hampton P. Fulmer of South Carolina, and Representative Clifford R. Hope of Kansas, the proposal was introduced into Congress in 1932 and hearings were held.¹¹ The plan then was modified in two respects: The group promoting it emphasized that participation would be voluntary, and it was definitely tied to production control. This version of the domestic allotment plan was included in the Agricultural Adjustment Act of 1933 as one of the means authorized for attacking the farm problem.

Federal Farm Board

The Agricultural Marketing Act of 1929 went farther in the direction of Government participation in agricultural affairs than the administration wanted to go, but not so far as the farm orga-

nizations would have liked (27, p. 86). Congress stated that its policy was to promote the effective merchandising of agricultural commodities, so that the industry of agriculture would be placed on a basis of economic equality with other industries. It hoped to achieve this end by minimizing speculation, preventing inefficient and wasteful methods of distribution, encouraging producers to organize effective marketing cooperatives, and aiding in preventing and controlling surpluses in any agricultural commodity through orderly production and distribution. A revolving fund of \$500 million, to be loaned to cooperatives for more effective marketing, was authorized. Stabilization corporations could be established for particular commodities under certain conditions.

The Secretary of Agriculture was an ex officio member of the Federal Farm Board. The Board financed certain departmental activities, including the expansion of the foreign work and the establishment of better outlook service in the Southern States. The Board also worked with the Department in developing a program for land use. The Division of Cooperative Marketing of the Bureau of Agricultural Economics was transferred to the Board on October 1, 1929.

The Division of Cooperative Marketing had been engaged in both research service and educational work in the period from 1926 to 1929. The research dealt with analysis of the marketing of many farm commodities and detailed critical studies and analysis of individual cooperative associations. Research provided the basis for service and advisory activities, where, in response to requests, the Division furnished information and advice with respect to the organization, management, and operation of cooperative associations.

During the period that the Division of Cooperative Marketing was part of the Federal Farm Board, primary emphasis was placed on appraising organization possibilities or determining the necessity and safety of Farm Board loans to cooperatives, rather than on new research. However, much use was made of prior research work conducted by the Division. Substantial progress was made in the organization of national and regional cooperatives. Many cooperatives, particularly regional cooperatives, survived and prospered (140).

The last report of the Federal Farm Board evaluated its activities in the cooperative field as follows:

The experience of the past year has emphasized the need for more complete organization of farmers in cooperative marketing associations, and for more effective development of those organizations as efficient producer-owned and producer-controlled marketing agencies. Continued progress was made during the year, in the creation of new associations, in strengthening associations already operating, and in maturing their organization under the test of severe business depression. No system of organization, however, would have been sufficient to offset the drastic decline in demand for farm products which characterized the year, and which largely overshadowed the benefits of cooperative efforts (335, p. 1).

Thus, in spite of its constructive work with cooperatives, the beginning of the deepest, longest economic depression this Nation had ever seen made success of the Farm Board's stabilization program impossible. The Board's last report contained a penetrating analysis of the reasons for its failure to stabilize prices, and pointed out that business recovery was essential to the restoration of farm incomes. At the same time, as the report stated:

Experience with stabilization thus demonstrates that no measure for improving the price of farm products other than increasing the demand of consumers can be effective over a period of years unless it provides a more definite control of production than has been achieved so far (335, p. 62).

Beginnings of Soil Conservation and Better Land Use

Many farmers were under economic pressure to obtain immediate cash returns to meet payments on land, machinery, and livestock. Consequently, if soil-wasting practices and methods promised more cash at the moment than soil-conserving practices, farmers had little choice in the course to pursue. Yet the need for preserving the soil and its fertility had been obvious to agricultural reformers and leaders since colonial days. The general conservation movement around the turn of the century stimulated interest in soil conservation, but the problem was regarded as one for the individual farmer. However, in 1928, Hugh H. Bennett, then in the Bureau of Chemistry and Soils, and W. R. Chapline of the Forest Service pointed out that soil erosion was of concern to the entire Nation. Their study *Soil Erosion a National Menace* emphasized that every aspect of life could be affected.

On November 21, 1928, during hearings before the Agricultural Subcommittee of the Appropriations Committee of the House of Representatives, Congressman James P. Buchanan of Texas remarked that an experiment station at Spur, Tex., had been doing valuable work on soil erosion. He then continued:

We think that the Nation needs a general policy of water and soil conservation, and the purpose of my developing the facts here to-day is to lay a foundation to procure an adequate appropriation for the department in cooperation with the States where possible to conduct experiments on different soil types throughout the agricultural sections of the United States for the purpose of keeping this water from running off, conserving it for the immediate benefit of the farmer, for the purpose of keeping it from washing away the soil and depleting it and ruining it forever, and thereby conserving it and having the effect of preventing the overflow into streams and rivers. It is a problem, the solution of which branches out and

results in so many benefits to agricultural interests from different angles, that it becomes vital, and we neglect our duty if we do not attend to it now (283, 1930, p. 310-311).

At the request of Representative Buchanan, Hugh H. Bennett then discussed some of the problems in soil conservation needing attention. Thereafter, A. G. McCall, Chief of Soil Investigations in the Bureau of Chemistry and Soils, and S. H. McCrory, Chief of the Division of Agricultural Engineering in the Bureau of Public Roads, presented data on the funds which would be needed to make a start on the problem. Congress responded by appropriating funds for soil erosion investigations and the establishment of regional soil erosion experiment stations in what was known as the Buchanan amendment.¹² Operation of the stations was assigned to the Bureau of Chemistry and Soils, in cooperation with the Forest Service and with the Bureau of Agricultural Engineering after the establishment of that Bureau on July 1, 1931. This was the beginning of a major program of soil and water conservation research.

Erosion control was an integral part of land use planning and conservation. In November 1931, Secretary Hyde called a national conference which met in Chicago to discuss the formation of a land use program. The conclusions of the 350 representatives of agricultural organizations led the Secretary to hope that planless agricultural development would give way to "a comprehensive and thoroughly integrated program of land utilization." The program looked toward: (1) A better economic utilization of land; (2) control of erosion; (3) provision for future timber and recreation needs; (4) preservation of wildlife; (5) gradual diversion of lands submarginal for farming; (6) guidance in land settlement; and (7) adjustment of local government institutions as important changes in land use are made.

The conference recommended a number of immediate actions. New irrigation and drainage projects should be postponed, submarginal and marginal land should be withdrawn from homestead entry, and land development enterprises should be regulated. A national inventory and classification of land resources should be made. Tax reform in relation to land use was needed. The Federal Government should regulate grazing, and steps should be taken to protect watersheds. The coordination of the activities of credit agencies making loans to farmers was recommended, and an expansion of the Department's soil conservation program was endorsed.

A national land use planning committee and a national advisory and legislative committee on land use were organized in 1932 to carry out the objectives of the conference. While notable changes were destined to take place in both soil conservation and land use planning within a few years, the Department and the conference had drawn the problems to public attention and had provided a basis for future expansion.

Timber Conservation

Before the land use conference was held, President Hoover in 1930 had appointed a Timber Conservation Board to study possible remedies for the depressed and distressed condition of the lumber industry. One result was a temporary relaxation of efforts by the Forest Service to sell Government timber. The study also led to the Copeland Report.

Senator Royal S. Copeland of New York introduced a resolution, adopted March 10, 1932, calling for a plan that would insure the economic and social benefits that could and should be derived from well-managed forest lands. Previous reports revealed the state of the forest without offering a plan for improving it. The Forest Service therefore prepared and sent to the Senate on March 27, 1933, "A National Plan for American Forestry." This report, printed by Senate order, became known as the Copeland Report. The main recommendations for a satisfactory solution to the Nation's forest problem were: (1) A large extension of public ownership of forest lands, and (2) more intensive management on all forest lands (211; 338, p. 13-14).

Emergency Activities

Even while the Department was looking toward the future in long-range soil and timber conservation and land use planning programs, it was engaged in emergency activities resulting from the Great Depression and from natural disasters that struck the country. The Secretary noted that nearly all of the increase in departmental expenditures had resulted from putting more men to work on roads and making direct loans to farmers suffering from drought, flood, and unprecedented economic distress.

Congress increased the amount of money available for Federal-aid road construction in fiscal years 1931 and 1932. In 1931, improvements were completed on 11,033 miles of road, and in 1932, on 15,997 miles. During fiscal year 1932, the Department spent \$212.4 million on road construction, compared with an average of \$90 million annually from 1923 to 1930. The work was handled through the Bureau of Public Roads. Another substantial increase was made for fiscal year 1933.

Over the same period of years, Congress appropriated larger sums than usual to be used in providing work for the unemployed in constructing and improving National Forest highways and forest development roads and trails. Smaller sums were appropriated for insect control, white pine blister rust control, and range

improvement. On April 15, 1930, Congress authorized an appropriation of \$900,000 for the construction of a Forest Products Laboratory building in Madison, Wis.¹³ Work had been carried on in buildings provided by the University of Wisconsin, but the new facilities permitted broader research. Its value has been amply demonstrated (115).

Floods in the Southeastern States in 1929, a severe drought that struck in 1930, and the continuing deterioration of the farmers' economic position led to greatly increased appropriations for disaster-type loans to farmers. Such loans had first been made in 1918, followed by others at frequent intervals. The loans were for the purchase of seed for planting new crops or for feed to maintain livestock, but in actual practice some of the money was used for living expenses of farm families. In 1929 and 1930, over 45,000 loans, totaling more than \$5 million, were made each year. In 1931, the number of loans jumped to 439,000, and the amount loaned to \$56 million. The next year, \$64 million was loaned to 508,000 families, one of the largest amounts and among the largest number of such loans ever made (364).

The individual seed and feed loans went to farmers who could not get credit because their usual sources could not supply them, to those whose resources had been seriously impaired by natural disaster, and to those whose land or types of farming did not enable them to qualify for ordinary commercial loans. The loans were administered through field offices established under the direction of C. W. Warburton, who was Director of Extension Work. Local seed-loan committees were established in each county to make recommendations to the field offices. These loans were made in many counties and in most of the States as the depression deepened.

A Federal Drought Relief Committee, headed by the Secretary of Agriculture, was established in 1930. In addition to recommending loan policies, it aided stricken counties in obtaining reduced railroad rates for shipments of hay, feed, and water. Measures taken for alleviating the economic depression, such as increased road construction, were emphasized in the drought areas.

In his 1931 report, Secretary Hyde pointed out the need for curtailing acreage and livestock breeding, and urged that this be done by voluntary concerted action. The Department issued a special outlook report in the fall of 1930, urging farmers to reduce their acreage of cotton. However, previous experience with such pleas and the problems faced by the Federal Farm Board indicated that such efforts were ineffectual. Voluntary concerted effort was a useful tool, but it was not a remedy for a desperate situation.

¹ Rogers, C. E., Opportunities and Satisfaction for Journalism Graduates in Government Information Work, Unpublished manuscript, 19 pp. [1961].

² 43 Stat. 970.

³ 44 Stat. 802.

⁴ 43 Stat. 674.

⁵ 45 Stat. 699.

⁶ 44 Stat. 841, 874.

⁷ 44 Stat. 630.

⁸ Office files of Office of Plant and Operations, USDA.

⁹ 46 Stat. 497.

¹⁰ 46 Stat. 11.

¹¹ Mordecai Ezekiel to Rexford G. Tugwell, Oct. 20, 1939, Agricultural History Branch Files, USDA.

¹² 45 Stat. 1207.

¹³ 46 Stat. 167.



“This Nation asks for action, and action now.”

The First Agricultural Adjustment Administration

Henry A. Wallace of Iowa became the 11th Secretary of Agriculture on March 4, 1933, a time of unprecedented crisis in American history. The banks were closed throughout the Nation. Millions of unemployed in the cities waited to see what President Roosevelt could do. In his inaugural address, he said, "This Nation asks for action, and action now."

In the country, despairing farmers hoped the new President and the new Secretary of Agriculture could save their land and return respect for law and order to their communities. On January 25, 1933, the president of the American Farm Bureau Federation had given an ominous warning, "Unless something is done for the American farmer we will have revolution in the countryside within less than 12 months" (290, p. 15).

Iowa farmers had used force to keep milk from being marketed and to prevent mortgage sales of their property. They had secured a mortgage moratorium law which declared that the safety and welfare of the State as a whole were endangered (117, pp. 85-86). The Governor of Minnesota had forbidden farm mortgage foreclosures and had offered to declare an embargo on the shipment of all farm produce and to enforce it with the State militia if the Governors of neighboring States would join with him (195, pp. 443-447; 131).

Milo Reno of Iowa, the fiery leader of the National Farm Holiday strike movement, told Secretary Wallace in a congratulatory telegram that he had an opportunity now to become one of the greatest or one of the most hated leaders in agricultural history (387, p. 13). The Iowa Farm Bureau and the American Farm Bureau Federation acclaimed the new Secretary as one of their own, a farm leader and a practical farmer (2, 3).

The selection of a Secretary of Agriculture from Iowa followed precedent. Nine of the former Secretaries had been from the Midwest, three from Iowa. Twelve years before, Henry A. Wallace's father had become the third Secretary from that State.

His grandfather had been influential in the selection of Tama Jim Wilson, the first Secretary from Iowa, and is credited with insuring that Wilson remained in that office for 16 years during three presidential administrations (136, pp. 133-135).

Like his father and grandfather, the new Secretary's editorials in the *Wallaces' Farmer* had gained him nationwide attention. Henry A. Wallace had also gained nationwide recognition as an agricultural economist and a corn breeder. He had devised the first of the corn-hog ratio charts, published *Agricultural Prices*, and served as an American delegate to the International Conference of Agricultural Economists in 1929. Hybrid corn grown on his farm had won Iowa corn yield tests. As founder of the first commercial hybrid seed corn company, he had established a business which was making money despite the depression (372, Mar. 4, 1933; 4; 136, pp. 281-282).

During ordinary times a man would not have needed recognition in all these fields to qualify for Secretary of Agriculture. But in a period of unprecedented economic and social crisis, the Nation's official agricultural spokesman needed in addition to have taken part in the economic and political struggle for "equality for agriculture" which had been waged since the early twenties. Here, too, Henry A. Wallace could qualify. He had played a part in the McNary-Haugen farm relief movement, which for a time had joined rival farm organizations and congressional Representatives of both parties. The new Secretary had used both his pen and his voice to urge the need for Government action to help farmers obtain equality of bargaining power. During the 1928 political campaign, he had spoken from the same platform as Milo Reno.

Henry A. Wallace's training in economics and his knowledge of history prevented his attributing the cause of the farmers' plight, as did Milo Reno, solely to the wicked machinations of the money lords. It prevented him from subscribing to one simple panacea as the solution. He had written and talked of complex causes. These included America's position as a creditor nation and the relative flexibility of farm prices as compared with prices for industrial products. He wrote also of the need for balanced production, an ever-normal granary to level out year-to-year variations in yield, stabilization of the dollar's purchasing power by varying its gold content, and better utilization of land, all to the end of securing equality for agriculture.

Plans To Solve the Farm Crisis

Secretary Wallace felt that the farm crisis called for immediate legislative action. He and Rexford Tugwell, the new Assistant Secretary of Agriculture, on March 8, 1933, urged President Roosevelt to ask Congress to take action at the special session of Con-

gress called for March 9. This session had been called on March 5 to act on the banking emergency. President Roosevelt agreed, and directed Secretary Wallace to call a farm leaders' conference (366, pp. 162-164).

Action on the banking emergency was immediate, with legislation passed on the first day of the session. Farm legislation was the sixth major piece of legislation passed in the first "Hundred Days" of the emergency session, but it was not enacted without debate and testimony of processors as well as farm representatives. During this period the farm depression deepened. Attention was focused on sporadic outbreaks of violence which resulted in the declaration of martial law in a number of areas and on the threat of a nationwide farm strike. Congress was confronted with the facts that realized net income of farm operators in 1932 was less than one-third of what it had been in 1929, and that farm prices had fallen more than 50 percent while the prices of things farmers had to buy had declined only 32 percent. Thus farmers were caught in a serious squeeze between the prices they received and the prices they had to pay, and they were burdened with inflexible mortgage payments on lands purchased at inflated prices. Farms for which they had spent life savings were being sold for debts and taxes. In Iowa, for example, one out of every nine farms had been sold one or more times by the sheriff in the period 1921-32, and over 52 percent of all foreclosures between 1920 and 1932 had resulted in deficiency judgments (117, p. 69).

The board of directors of the American Farm Bureau Federation, called into special session at Chicago, sent the President a telegram on March 8 urging that he recommend immediate action to Congress on the restoration of price parity, monetary reform, guarantee of new deposits of all banks, and relief for distressed mortgage indebtedness (18, Mar. 9, 1933).

The National Farmers Union and the National Farm Holiday had been urging a mortgage moratorium and guaranteed cost of production. The National Grange had endorsed an export debenture form of farm relief. All three had backed a domestic allotment bill which had failed to pass the Senate during the preceding session of the "lameduck" Congress (195, pp. 432, 433, 455-462).

Representatives of the American Farm Bureau Federation, the National Farmers Union, and the National Grange were among the 50 farm spokesmen who arrived in Washington on March 10, 1933, for the farm leaders' conference. An agreement was reached on the need for broad emergency powers which would include authority for using most of the methods previously proposed. On March 11, a committee from the group of 50 called on the President with the proposal that such broad emergency powers be recommended to Congress (18, Mar. 21, 1933).

President Roosevelt directed the Department of Agriculture to prepare the text of such legislation. A draft was quickly completed

and on March 16 sent by President Roosevelt to Congress. In his March 16 message, the President recommended quick action on the bill as an experiment on "an untrod path" (271, *Mar. 16, 1933*). The act had cleared both Houses of Congress by May 12 and was signed by the President on that day.

Agricultural Adjustment Act of 1933

It is indicative of the emergency situation and of the variety of proposed solutions that the Emergency Farm Mortgage Act of 1933 and an act empowering the President to inflate the currency were added to the Agricultural Adjustment Act as Titles II and III, respectively.¹

To accomplish the goal of restoring farm purchasing power of agricultural commodities to the prewar 1909-14 level, the Secretary of Agriculture was authorized to secure voluntary reduction of the acreage in basic crops through agreements with producers and by using direct payments for participation in acreage control programs; to regulate marketing through voluntary agreements among processors and distributors; to license processors, associations of producers, and others handling agricultural commodities to eliminate unfair practices or charges; to determine the necessity for and the rate of processing taxes; and to use the proceeds of taxes and appropriated funds for the cost of adjustment operations, for the expansion of markets, and for the removal of agricultural surpluses. Wheat, cotton, field corn, hogs, rice, tobacco, and milk and its products were designated as basic commodities. The Jones-Connally Act of April 7, 1934, expanded the list of basic commodities to include rye, flax, barley, grain sorghums, cattle, and peanuts. On May 9, 1934, the list was expanded to include sugarbeets and sugarcane. On August 24, 1935, potatoes were added.²

The broad and flexible powers granted by the Agricultural Adjustment Act emphasized production adjustment, but also provided authority for carrying out two-price programs similar to the McNary-Haugen and export debenture plans. Authority to guarantee cost of production, sponsored by the National Farmers Union, had been added as an amendment to the bill in the Senate, but had been eliminated before its enactment (271, *Apr. 13, May 10, 1933*).

The Agricultural Adjustment Act vested authority in the Secretary, making only one reference to the Agricultural Adjustment Administration, which was to be established in the Department for administration of the functions. The Secretary was authorized to appoint experts without regard to the civil service laws and, with the President's approval, to make necessary regulations which would have the force and effect of law.

George N. Peek, who had been an originator of the McNary-Haugen plan and had led the fight for its adoption, was designated

as the first Administrator of the Agricultural Adjustment Administration. Peek remained in this position from May 13, 1933, until December 15, 1933, when he accepted the position of special adviser to the President on foreign trade. Charles J. Brand was selected as Coadministrator. Brand had served as Chief of the Bureau of Markets in the Department of Agriculture and, as a consulting specialist to the Department, had worked on the draft of the first McNary-Haugen bill. After Brand's resignation, effective September 30, 1933, the position of Coadministrator was discontinued.³

Despite Administrator Peek's reluctance to use production control, it was chosen by Secretary Wallace and President Roosevelt as the major method to be used in the drive to raise farm purchasing power. Peek had made it clear that he considered marketing agreements, with the diversion of surpluses into export or other channels, as the most important, if not the only, sound method to be used in raising farm prices (*170, p. 75*).

Coadministrator Brand agreed with Peek, but others who had joined him earlier in the fight for the McNary-Haugen plan were now convinced that production control was necessary. Chester Davis, who headed up the Division of Production under Peek and who was to succeed him as Administrator, effective December 16, 1933, agreed with Wallace that production control should receive major emphasis.⁴ M. L. Wilson, head of the Wheat Section in the Division of Production, had supported the McNary-Haugen plan, but had turned from it to play a major role in the development of the domestic allotment plan from which the production control program evolved (*312, no. 649-34*).

The increasing pressure of the agricultural crisis and the fact that the act was passed after the crop planting season had begun impelled the Agricultural Adjustment Administration to proceed with the greatest possible speed. Emphasis was placed on production control for the basic commodities, but Government purchases, commodity loans, and marketing agreements were also used to provide more immediate relief and to supplement production restriction for some basic commodities. Marketing agreements, supplemented at times by Government purchases, were used for dairy products and for nonbasic commodities. Funds and authority provided by legislation for general emergency relief and recovery were used in addition to those authorized by the Agricultural Adjustment Act in the drive to raise farm purchasing power (*234, pp. 201-206; 165, pp. 186-216*).

Organization

Both organization and programs had to be developed at break-neck speed in the Department's "race with the sun," and both had

to be adapted quickly to meet changes in the weather as well as changes in economic conditions.

The first organization was set up around two major program divisions, the Division of Production and the Division of Processing and Marketing. These program divisions were divided into commodity sections with four commodity sections—Dairy, Tobacco, Rice and Sugar, and Special Crops—reporting to both program divisions. Duplicate commodity sections were established for wheat, cotton, and corn and hogs. In addition to the major program divisions, the Administration had the following Divisions: Consumers' Counsel, Information and Publicity, Finance and General Counsel (234, *ch. 2*; 165, *ch. 3*).

Work had begun on the formulation of cotton and wheat programs before the organization was formally established. Cotton and wheat spokesmen urged removal of land from production (366, *ch. 14*).

Programs for the Basic Crops

The situation confronting cotton farmers seemed to demand immediate and drastic action. The price of cotton had fallen from 29 cents a pound in 1923 to 6½ cents in 1932. Increased cotton acreage and favorable weather threatened to drive prices even lower and to increase a carryover which had already reached three times normal size. A cotton plowup campaign was announced June 19, 1933, with the objective of eliminating, during the first year, 10 million acres, or one-fourth of the growing crop. This objective was reached (234, *pp. 23, 24, 28*).

Under the first cotton contracts, offered during June 1933, growers agreed to plow up before harvest from 25 to 50 percent of their acreage in cotton in return for "rental payments" in cash, or in cash plus options based roughly on potential cotton eliminated. Under a second series of contracts, signed in the early months of 1934, farmers agreed to limit their acreage planted to cotton for 2 years. During 1934, they agreed to plant between 55 and 65 percent of their base acreage, which represented the acreage planted for the crops of 1928–32. They received "parity payments" as well as cash-rental payments during 1934 and 1935. The parity payments were made on 40 percent of the base production, which was estimated to be the domestically consumed portion of production (181, *pp. 52–53*). Part of the 1933 rental payments for cotton could be taken in options at 6 cents per pound on Government-held cotton which had been acquired through operations of the Federal Farm Board. Most of the options were attracted into a Cotton Producers' Pool which was set up January 8, 1934, as an organizational unit within the Agricultural Ad-

justment Administration under the management of Oscar Johnston.

However, more direct and drastic action on cotton was demanded and secured before the first crop under the acreage reduction program could be marketed. A sharp decline in cotton prices following a short speculative boom and the serious financial condition of farmers led to demands during September 1933 that the currency be inflated and that the minimum price of cotton be fixed at 15 cents a pound. The Administration responded with a nonrecourse loan of 10 cents a pound on the 1933 crop of cotton. The loan rate was raised to 12 cents for 1934-35, but was dropped to 10 cents for 1935-36, supplemented by cotton price adjustment payments (237, pp. 129-131).

The loans were made possible by the establishment, on October 17, 1933, of the Commodity Credit Corporation by Executive Order 6340 of October 16. The funds were secured from an allocation authorized by the National Industrial Recovery Act and the Fourth Deficiency Act. It was argued that the loan would enable growers to hold their cotton until the price could advance as a result of the production control program and of the Administration's currency policy (366, pp. 59-60).

Voluntary control of cotton production was supplanted by compulsory control with the enactment of the Bankhead Cotton Control Act of April 21, 1934.⁵ The controls became effective when two-thirds of the producers voting in a referendum approved them (312, no. 1679-34). This act provided heavy taxes on cotton ginned in excess of individual quotas. Impetus for the enactment of the legislation came from spokesmen for cotton farmers and congressional Representatives and Senators who feared that intensive cultivation and increased plantings by noncooperating farmers would tend to nullify the effectiveness of the voluntary program (181, pp. 92-93; 312, no. 1835-34).

As a supplement to the adjustment program, loans were made by the Reconstruction Finance Corporation to the Chinese Government to purchase American cotton and to American exporters to finance exports of cotton to Russia (165, p. 99).

Prospects of a sharp decline in the winter wheat crop due to weather conditions saved wheat farmers from being asked to join cotton farmers in plowing up part of their growing crops. The dramatic proposal to pay farmers for plowing up a food crop had been discussed at a May 26, 1933, meeting of spokesmen for wheat producers, processors, and distributors with the Secretary and officials of the Agricultural Adjustment Administration. Of the alternative proposals for wheat discussed during this meeting, the domestic allotment plan received the support of spokesmen for the growers and was generally endorsed by most of the handlers and processors (234, 47-49; 61, 50-52).

The domestic allotment plan was chosen and the program for wheat was announced in broad outline on June 16, 1933. This was followed by a formal proclamation on June 20. Under this pro-

gram, contracting producers who agreed to limit wheat acreage for the 1934 and 1935 crops received payments on the basis of their proportionate share of the national production domestically consumed.

Adjustment payments of around 30 cents per bushel were made for the crop years 1933, 1934, and 1935 on 54 percent of the average amount of wheat produced on the grower's farm during the years 1928-32. In return, the wheat farmer agreed to reduce his wheat acreage for the 1934 and 1935 crops by a percentage to be determined by the Secretary, but not to exceed 20 percent. The cut in wheat acreage required under the contracts was 15 percent for 1934 and 10 percent for 1935. Reduction of wheat stocks resulting from the droughts of 1933 and 1934 made it possible to avoid such large acreage cuts for wheat as were imposed for cotton. The wheat program stressed the importance of the payments in increasing farm purchasing power and farm income, and the necessity of restricting acreage enough to prevent an increase in production while the program was in effect (165, pp. 93-94).

The acreage adjustment program was supplemented for wheat-growers in the Pacific Northwest by special surplus disposal programs which included the use of processing tax funds to subsidize exports of wheat and flour under a marketing agreement effective October 10, 1933, and the use of funds of the Reconstruction Finance Corporation for a loan to the Chinese Government to enable it to buy wheat and flour. A small loan was also made to the Philippines (61, ch. 9). Following a sharp drop in wheat futures on the commodity exchanges, beginning October 17, 1933, over 16 million bushels of wheat were purchased for relief distribution by the Federal Surplus Relief Corporation, which had been established October 4, 1933.⁶ The International Wheat Agreement, signed late in 1933, was considered an important supplement to the wheat adjustment program (234, pp. 49-51). It provided for export quotas and curtailment of 1934 acreage of leading export countries, and for commitments by importing countries to reduce barriers to wheat imports. This agreement broke down within a year; it was not to be revived until 1949 (26, pp. 397, 503-504).

Production control programs for tobacco were distinguished from control programs for the other commodities by the use of different base years—the period August 1919 to July 1929 was the base for determining the parity price goal—and by the use of quantity, as well as acreage, control. Tobacco production allotments representing the amount which could be produced for sale were assigned under the acreage adjustment contracts for all types except cigar tobacco. Six types of tobacco were treated as separate commodities in the application of adjustment programs (191, pp. 88-93).

Another distinguishing feature of the programs for tobacco was the use of marketing agreements in 1933 to raise the prices of several kinds of tobacco in anticipation of the price-increasing

effect of controlled production. Under six agreements, processors contracted to pay prices substantially higher than those paid the preceding year and to take quantities of the commodity at least equal to those which they were accustomed to purchase. These price-fixing agreements had been preceded by protest meetings of growers demanding immediate action to raise prices, by the closing of all tobacco markets in North Carolina and South Carolina by the State Governors, by the preparation of plans by the Tobacco Section of the Agricultural Adjustment Administration to use the licensing power conferred by the Agricultural Adjustment Act to require all buyers of flue-cured tobacco to pay minimum prices, and by a successful signup campaign for reduction of tobacco acreage for the 1934 crop (191, *ch. 5*).

The first marketing agreement, the one on flue-cured tobacco, became effective on October 12, 1933. Marketing agreements for other types of tobacco followed. The marketing agreement for Connecticut Valley shade-grown tobacco provided for production control without using a processing tax. Handlers were subject to licenses.

Contracts limiting the acreage harvested of cigar-filler and binder tobacco for the 1933 crop resulted in plowing under more than 12,000 acres of planted tobacco. Adjustment contracts for the other five types of tobacco applied only to the 1934 and 1935 crops.

Tobacco growers who had signed Government contracts, like participators in the cotton program, wanted to insure that non-cooperators could not profit from higher prices on unrestricted production. They secured enactment of the Kerr-Smith Tobacco Control Act of June 28, 1934, which provided a mandatory tax upon the sale of all tobacco harvested in the crop year 1934-35 except Maryland, Virginia sun-cured, and cigar leaf tobaccos.⁷ Tax payment warrants were issued by the Secretary of Agriculture to contract signers. Upon a favorable vote of producers who controlled three-fourths of the land, the program could be applied to any type of tobacco for the 1935-36 marketing year. Growers of the types of tobacco to which the tax was applied during the 1934-35 crop year voted overwhelmingly for its continuance, and in February 1935 growers of cigar-filler and binder tobacco voted to have the tax applied to their crops.

The corn-hog program was the last of the major adjustment programs to be launched. The critical situation facing producers had to be balanced against the need for time to work out a control program for two separate but closely interrelated commodities. The Agricultural Adjustment Administration was committed to developing and operating voluntary programs with the assistance of spokesmen for the producers of each commodity. Since no organization with adequate scope devoted exclusively to the corn-hog industry was in existence at the time the act was passed, one of the first steps taken by Secretary Wallace was to encourage

the development of such an organization. Following a series of meetings of producer representatives, the National Corn-Hog Producers' Committee of Twenty-five was selected July 18, 1933 (234, pp. 101-106).

By July 1933, sharply reduced corn prospects due to unfavorable weather had resulted in the decision that corn producers would not be asked to join cotton and tobacco producers in the destruction of a growing crop. Since the short 1933 corn crop would not bring about a decrease in hog production until 1934-35, attention was first concentrated on finding a solution for the problem of heavy supplies of hogs expected to be marketed during the winter of 1933-34. A large expansion in hog breeding had been stimulated by the cheap corn of the preceding year.

The National Corn-Hog Producers' Committee recommended immediate removal from marketing channels of approximately 4 million pigs weighing less than 100 pounds and about 1 million sows about to farrow. Premium prices were to be paid for the pigs and a special bonus offered for the sows. Insofar as practicable, the pork products were to be distributed through relief channels. Pigs that could not be economically processed for food were utilized for grease and tannage (234, pp. 102-119; 80, ch. 4). Actual purchases were about 6.2 million pigs and around 222,000 sows. About 100 million pounds of edible pork were distributed for relief. In a supplemental program, approximately 1.4 million head of live hogs and approximately 92 million pounds of pork were purchased by the Federal Surplus Relief Corporation. This program began during November 1933 and ended May 1934 (235, pp. 88-89).

Officials responsible for the decision on the emergency purchase and slaughter of sows and pigs realized that the program would create more unfavorable public reaction than the plowing up of cotton and tobacco had produced, but they felt such drastic action was necessary. The emergency slaughter program, which the press called the killing of the little pigs, shocked the public and distressed many farmers. Some farm people felt the drought of 1934 was a form of divine punishment for the destruction of food. Commenting in 1934 on these first adjustment activities, Secretary Wallace wrote:

To have to destroy a growing crop is a shocking commentary on civilization. I could tolerate it only as a cleaning up of the wreckage of the old days of unbalanced production (366, pp. 174-175).

By October 1933, Corn Belt farmers were demanding an emergency program for corn to raise prices before the longer time corn-hog adjustment program could become effective. Sentiment for price fixing was strong in the corn area where the National Farm Holiday was threatening a national strike (195, pp. 484-485; 312, no. 1054-34). The National Corn-Hog Producers' Committee of Twenty-five had recommended negotiation of a marketing agreement to insure parity prices for hogs. Farm pressure for price fixing brought about a demand for Government pegging of prices

at parity levels by 10 midwestern Governors meeting in Des Moines on October 31, 1933 (*190, p. 170*). Corn Belt farmers pressed the administration to provide as favorable treatment for corn as had been provided for cotton. The Illinois Agricultural Association argued that corn loans were necessary to prevent the greater part of the benefits of the acreage reduction program from being realized by the grain trade (*79, pp. 56-57*).

Secretary Wallace and officials of the Agricultural Adjustment Administration were opposed to price fixing, but were concerned with the problem of providing an immediate stimulus to farm purchasing power as a part of the overall recovery program. A corn loan was justified on the basis that it would give farmers in advance some of the benefits to be derived from the short corn crop of 1933 and the substantial acreage reduction scheduled for 1934 (*366, pp. 59, 64-65*).

With the approval of President Roosevelt, a corn loan was announced on October 25, 1933 (*312, no. 944-34*). The loan at 45 cents, substantially above the farm price of corn, was characterized as "the equivalent of a modified price-fixing plan." It was regarded as sound because borrowers had to agree to participate in the 1934 corn-hog reduction program. Corn loans at 55 cents were offered in 1934 and at 45 cents in 1935, but market prices were above these loan rates in both years.

The emergency purchase program and corn loans above market prices were regarded as temporary emergency measures to increase farm prices and purchasing power until the longer time adjustment program could raise farm prices and incomes. The general plans for the corn-hog adjustment program were announced by Secretary Wallace and Administrator Peek on October 17, 1933, but the contract signup campaign did not get underway until late in January of 1934 (*79, p. 67; 235, p. 93*).

Participants in the program were required to cut their corn acreage below the average acreage planted in 1932 and 1933 by not less than 20 percent. In return, the growers were paid 30 cents per bushel on their average yield on the acreage taken out of corn up to 30 percent of the base acreage. They were also required to cut the number of litters and the number of hogs produced for market at least 25 percent in return for payments of \$5 per head for the hogs the producer was authorized to raise. The provisions on corn were later modified to adjust to the drought emergency. The contracts for 1935 required a 10-percent reduction in corn acreage and hog production from the amount in the base period (*235, pp. 93-94*).

The sugar program, authorized by the Jones-Costigan Act of May 9, 1934, was the first adjustment program applied to a heavily imported crop (*165, pp. 106-110*). It provided a quota system to limit supplies in insular areas and to limit further expansion of acreage in the continental United States.

Adjustment payments were made for the 1934 and 1935 crops

of sugarbeets and sugarcane to producers in the continental United States who agreed to plant within acreage allotments for 1935 and to comply with other terms of the contract. In addition to adjustment payments, "deficiency payments" were made on the estimated production of the grower's planted acreage when there was bona fide abandonment of the crop by reason of drought or other natural calamity (235, pp. 169, 172).

Preliminary plans were made for a contractual adjustment program for cattle following enactment of the Jones-Connally Cattle Act of April 7, 1934, but the 1934 drought led to abandonment of a control program (80, pp. 183-191).

A production adjustment program for rye similar to the wheat program was drawn up in 1935, but the Agricultural Adjustment Act was declared unconstitutional before the program could be put into effect (237, pp. 260-263).

The program for rice during 1933 and 1934 was distinctive because production control was carried out through marketing agreements between the Secretary of Agriculture and rice millers. Production control was to be effected by withholding 40 percent of the grower's price at time of delivery as a "trust fund" to be distributed to cooperating growers upon proof of compliance. A more typical production adjustment program was introduced in 1935, following enactment of the De Rouen Rice Act of March 18, 1935, with individual contracts and benefit payments to be financed by a processing tax of 1 cent per pound (165, pp. 111-112).

A production control and diversion program was developed for peanuts after their designation as a basic crop (165, p. 113; 163, pp. 88-95). The program, announced September 29, 1934, included contracts with peanut growers obligating them to plant not over 90 percent of the acreage planted in 1933 or 1934, or the average of 1933 and 1934 acreage (235, pp. 192-193). The contract provided for benefit payments, diversion payments for growers who diverted peanuts to oil or feed uses, and processing taxes. A marketing agreement had been in effect for peanuts before Congress added them to the list of basic commodities. Adjustment programs were not drawn up for the other basic commodities.

Formulation of a flaxseed program was proposed but none was developed. No attempts were made to develop a program for barley or grain sorghums (165, p. 111).

Marketing Agreements

By 1935, the Agricultural Adjustment Administration was using marketing agreements in the program for only one of the basic commodities, milk and its products (163, pp. 50-58). Secretary

Wallace and Administrator Davis felt that production control was the basic approach and that it could be supplemented but not evaded by the use of marketing agreements (366, pp. 190-195). Marketing agreements covering various fluid milk areas had been initiated in 1933 with the understanding that they would be followed by a production control program which would include the entire dairy industry.

A tentative program to restrict milk supplies was drawn up, but was abandoned following regional conferences in the spring of 1934. Opposition of the dairy interests, the complexity of the problem, and the effect of the drought on dairy herds and milk production contributed to the decision not to press plans for production control of milk supplies (235, pp. 132-133).

The first marketing agreement became effective on August 1, 1933 (163, p. 50). It covered the handling of fluid milk in the Chicago market. The Chicago agreement was followed by 14 other fluid milk agreements between August 1, 1933, and December 20, 1933. Agreements were also used for evaporated and dry skim milk. The fluid milk marketing agreements provided for: (1) the classification and pricing of milk according to the use made of it by distributors; (2) a method of prorating to producers the proceeds of sales to distributors, involving some form of pooling; and (3) a schedule of resale prices to be charged distributors. The agreements attempted to enforce elaborate bargaining schemes already worked out between fluid milk cooperatives and distributing agencies, and to make these arrangements binding upon associations not already a part of their particular bargaining arrangements. Agreements were supplemented by licenses to be issued by the Secretary to authorize processors and others to deal in particular commodities.

Because of administrative difficulties, all marketing agreements in effect were terminated on February 1, 1934, and the Administration sought to insure enforcement through use of licensing after abandoning attempts to establish resale prices (312, no. 1543-34; 163, pp. 218-219).

Producers of fruits and vegetables and of some other nonbasic commodities who had operated successful cooperatives made extensive use of marketing agreements. The first marketing agreement in operation for a nonbasic crop was for California canning peaches. It became effective on August 17, 1933. Some 26 agreements were put into operation for fruits, vegetables, nuts, and minor products. Most of these were accompanied by licenses (234, pp. 182-188). Producer prices were raised by controlling the timing and the volume of the commodity marketed. The methods used included: (1) restriction of shipments through quality control; (2) delaying all shipments during period of market gluts; and (3) proration of supplies shipped.

On August 24, 1935, amendments to the Agricultural Adjustment Act authorized the substitution of Secretary's orders with

or without marketing agreements in place of agreements and licenses.⁸ The amendments specified and limited commodities to which orders could be applied and spelled out requirements for handler and producer approval. Orders issued without marketing agreements had to be favored by at least two-thirds of the producers by number or volume, but did not require approval of handlers. Cooperatives were given the right to vote in the name of their members on the approval of orders.

Surplus Disposal and Drought Programs

Surplus disposal programs of the Department were initiated as an emergency supplement to the crop control programs. The paradox of crop control and hungry people, particularly when it took the form of crop destruction, troubled the Secretary and officials in the Agricultural Adjustment Administration. A provision in the Agricultural Adjustment Act authorized the use of processing tax funds for surplus distribution.

Processing tax funds were used to process heavy pigs and sows slaughtered during the emergency purchase program for distribution to unemployed families by the Federal Emergency Relief Administration. The cost of distribution was borne by the Federal Emergency Relief Administration (234, pp. 201-206).

The Federal Surplus Relief Corporation was established October 4, 1933, as an operating agency for carrying out cooperative food purchase and distribution projects of the Department of Agriculture and the Federal Emergency Relief Administration (366, pp. 183-184). Following the establishment of the Corporation, funds of the Department and of the Relief Administration were used for purchases of basic commodities. Federal Emergency Relief Administration funds were also used for the surplus removal of nonbasic commodities. Special drought relief funds and appropriations under the Jones-Connally Act provided for purchases of cattle, calves, sheep, and goats in drought-stricken areas during 1934 and early 1935. Animals which had not been condemned as unfit for food were turned over for relief distribution. Other food products purchased for surplus removal and distribution in relief channels included butter, cheese, and flour (173).

To coordinate the procurement plans of the Agricultural Adjustment Administration with the activities of the Federal Emergency Relief Administration, a Special Commodities Section was established within the Agricultural Adjustment Administration during September 1933. This Section was transferred to the Office of the Comptroller in a reorganization announced January 2, 1934, but emerged again as the Commodities Purchase Section during 1934 (234, p. 14; 312, no. 1504-34; 163, p. 27).

Innovations in Organization and Administration

The resignation of Administrator Peek, December 15, 1933, was followed by a reorganization of the Agricultural Adjustment Administration. In this reorganization, announced January 2, 1934, Administrator Davis eliminated the dual commodity organization which had reported through separate production and marketing divisions. The number of commodity sections was reduced by combining some and eliminating others. A new Commodities Division was established to take over functions of the former Production Division and most of the functions of the former Processing and Marketing Division (312, no. 1504-34).

It was possible to eliminate some minor commodity sections because most of the work on codes under the National Industrial Recovery Act was to be transferred back to the National Industrial Recovery Administration by Executive Order 6551 of January 8, 1934. This work had been transferred to the Agricultural Adjustment Administration on June 26, 1933, because of Peek's and Brand's special interests.

The Replacement Crops Section was transferred to a new Division of Program Planning, initially called the Planning Division. The section on foreign trade, eliminated in the initial stage of the reorganization, was revived and placed within the Program Planning Division.

The importance of this new Division was indicated by its broad assignment and by its being headed by one of the three Assistant Administrators of the Agricultural Adjustment Administration. Assistant Administrator Howard R. Tolley, who headed the Program Planning Division, was directed to work out an alinement of different production adjustment plans and to correlate the activities of the Agricultural Adjustment Administration with those of other branches of the Department of Agriculture.

The completion of contracts for the retirement of some 30 to 40 million acres from the production of basic crops not only confronted farmers and the Administration with the problem of what to do with the retired acres to prevent soil damage from weeds and erosion, but with the problem of interrelationship between the different emergency reduction plans. Seeding contracted acres to grass would help prevent soil erosion, but would run the risk of encouraging increased beef and dairy production. If this happened, a problem would be created for beef and dairy producers unless effective consumer demand for beef and milk products could be increased. Effective demand in turn was related to consumer income and the overall standards of living.

The Program Planning Division attempted to merge emergency methods and programs into a comprehensive plan for agriculture

as a whole (312, no. 1762-34). Designed to serve as a goal, it was to be flexible enough to meet changes in international and industrial conditions. It was to provide for as much flexibility and freedom of action on the part of individual farmers as was consistent with a proper balance between farm production and demand.

The national longtime plan was to provide for the adjustment of the agricultural plant to the size and shape needed so that all uses of land and the potential need for all uses could be given their proper place. The volume and kinds of crop production were studied, with consideration given to the need for raising the nutrition level of the population and to the need for soil conservation. Studies were made of nutrition needs in relation to land use and of the adaptation of different regions to various crops and classes of livestock.

Longtime land use plans were also concerned with the removal of large areas of submarginal land from production for use in parks, forests, or recreational purposes. An allotment of \$25 million of relief funds made in 1934 was earmarked to initiate the withdrawal of submarginal land from crop usage (234, p. 273). The Program Planning Division pointed out that retirement of submarginal land would make little contribution to the solution of the surplus-production problem. At the same time, the Division felt the need to interrelate social and economic problems.

The Program Planning Division's broad studies and proposals included most of the ideas which were later introduced into acreage-adjustment and price-support programs as well as a number of untried proposals which are still being discussed. These included an ever-normal granary plan to insure adequate reserves for consumers during droughts and to protect farmers from the price-depressing effect of surpluses; control of livestock production through the control of feed crops; and making proper land use the major objective in the organization of crop control programs.

The reorganization, announced January 2, 1934, also gave prominence to information work, since Alfred P. Stedman, who headed the new Division of Information and Records, successor to the Division of Information and Publicity, was designated one of the three Assistant Administrators.

The Consumers' Counsel Division, which had been established as a separate division during June 1933, was made a part of the Division of Information and Records. It was to emerge again as a separate division, after the resignation of the first Consumers' Counsel, in a February 1935 reorganization of the Agricultural Adjustment Administration.⁹

The Consumers' Counsel Division, an innovation in the Federal Government, had been established by Administrator Peek at the insistence of Secretary Wallace, who had discussed the proposal with President Roosevelt¹⁰ (43, p. 202). Coadministrator Brand may have suggested the idea. He recommended the appointment of Frederic C. Howe as the first Consumers' Counsel. Congress, in

the Agricultural Adjustment Act of May 12, 1933, had stated that its policy was to protect the consumers' interest. Farm production was to be readjusted at a rate that would not increase the percentage of the return to the farmer from retail expenditures for farm products over the percentage return to the farmer in the period August 1909-July 1914. The legislation did not direct the establishment of a Consumers' Counsel, and the functions of the office were never clearly defined. It seems that the Division was expected to prepare and distribute material relative to the effect of the agricultural adjustment program upon consumers' costs with the particular objective of calling attention to any attempts on the part of wholesalers and retailers to pyramid costs. Another function was to prepare economic analyses from the consumers' viewpoint of the effect of proposed programs, particularly those involving marketing agreements and orders (234, pp. 209-214). These were for the use of administrative officials who were to participate in the conferences and hearings through which detailed features were worked out.¹¹ In representing the consumers' interest within the Agricultural Adjustment Administration, officials considered that the Counsel and his staff should function as a service group to keep the Administration fully informed.

Staff members of the Consumers' Counsel Division at times interpreted the function of the Counsel broadly to represent consumer interests against nonconsumer (particularly middleman) interests, taking a militant position against price increases for consumers under marketing agreements and for reduction of processing margins.

It is impossible to appraise the effect of the Consumers' Counsel organization on the formulation and modification of the programs of the Agricultural Adjustment Administration, or upon the development of consumer consciousness on the part of those who received informational material. The *Consumers' Guide*, a bi-weekly bulletin issued by the Division, was given wide circulation.

Another and more lasting innovation in administration was the use by the Agricultural Adjustment Administration of State, county, and local committees for the administration of a national program. Secretary Wallace characterized the farmer committees and the county associations of farmers as "economic democracy" (366, pp. 264-266).

The idea of having farmer administration of a farm relief program had been advanced by M. L. Wilson and others who worked on early versions of the domestic allotment plan. The Agricultural Adjustment Act of May 12, 1933, authorized the Secretary to establish State and local committees or associations of producers for the more effective administration of the agricultural adjustment functions.

The Secretary used the authorization to establish State and local committees and associations of producers at the beginning of the corn-hog adjustment program. State Corn-Hog Committees were

appointed by the Secretary of Agriculture for nine States during December 1933. Directors of the State extension services were chairmen of five of these committees, while farmers served as chairmen of four (*234, pp. 133-136*).

Community committees were elected by members of local control associations. These associations were composed of all farmers in the community who had signed a contract to participate in the corn-hog program. Members of all community committees in a county formed a board of directors for the county control association. As the county control association's board of directors, community committeemen elected a county allotment committee from among the membership of the board. The president of the board of directors served as chairman of the county allotment committee. The secretary of the committee and the treasurer of the committee were not required to be members of the association. County agricultural agents frequently served as secretaries of committees, and not infrequently as secretary-treasurer.

The establishment of production control associations and the use of county committees in the administration of the adjustment programs developed more slowly. They never reached so high a degree of farmer control of administration as in the corn-hog areas. In other areas, State extension services exercised more direct responsibility. In the cotton adjustment program, State extension service directors and county agricultural agents served as State and county administrators of the program, and appointed farmer committees served in an advisory capacity during the first years of the program (*181, pp. 74-81*). There were many variations between these two extremes in the administration of other adjustment programs.

However, Secretary Wallace had strong convictions on the need to secure direct participation of farmers in the administration of the adjustment program, and steps were taken to increase farmer participation in all programs and areas. In addition to the conviction that the use of committees provided the most democratic method for administering the adjustment program, the Secretary believed that this type of administration was the most effective. He felt that farmers would be more enthusiastic about the program and more conscientious about complying with all program requirements if they selected their own leaders. Secretary Wallace was convinced that these county control associations would develop rural leadership capable of understanding national problems and of using the centralizing power of the National Government to help solve these problems (*365*). An additional advantage in using the committee system over an administrative official was that a number of farmers became familiar with program objectives and with detailed program requirements in the process of administration.

Farmer participation in the program was not limited to administration of a program drawn up in Washington. Committeemen were encouraged to recommend changes in the program and in

selected counties planned a longtime adjustment program for the county, based on land use needs for the local area (237, pp. 38-41).

Farm organization leaders and specially organized committees of farmers had been called to Washington and consulted at regional meetings when plans for the formulation of the corn-hog and other programs were first made. Advisory committees with farm and land-grant college spokesmen had been appointed to assist in formulating and initiating the commodity programs. Farm organization leaders and representatives had been consulted before the Agricultural Adjustment Act was drafted.

In addition to consulting farm organization leaders on the original legislation and supplementary amendments, questionnaires were used to learn the sentiment of representative cotton producers toward compulsory control legislation. Secretary Wallace withheld Department participation in drawing up the endorsement to the proposed Bankhead legislation until he was convinced that compulsory controls were favored by a majority of producers (312, nos. 1835-34, 1807-34).

Both the Bankhead Cotton Act and the Kerr-Smith Tobacco Act required a favorable referendum vote of two-thirds of the producers or of producers operating three-fourths of the land before the program continued beyond the initial 1-year period.

Before the signup for the 1935 corn-hog programs was initiated, producers were asked to vote by written ballot on continuation of the program. During the first 2 weeks of October 1934, approximately 70 percent of the contract signers who participated in the referendum voted to continue the program. Cotton and tobacco producers voted in favor of continuing the adjustment programs during December 1934 (235, pp. 54, 108-109, 140). Wheat producers voted in favor of continuing the adjustment program early in 1935 (237, p. 155).

Despite the speed with which the adjustment programs had to be formulated and carried out, the Administration found time to include farmer representatives and spokesmen in all stages of the process (366, pp. 263-268). Farmer participation in program making and in administration was called economic self-government and economic democracy. It was also called decentralized administration of a national program. Modifications were to be made in the farmer-committee system, but it was to become a part of succeeding farm programs concerned with farm prices and conservation. After 1938, the use of farmer committees in program administration was to become a mandatory legislative requirement.

Supreme Court Decision

The agricultural adjustment program with its extensive system of farmer committees was brought to an abrupt halt on January 6,

1936, by the *Hoosac Mills* decision of the Supreme Court, which invalidated the production control provisions of the Agricultural Adjustment Act of May 12, 1933.¹²

Secretary Wallace and farm leaders protested what they considered the injustice of the decision and began immediate work on replacing the Agricultural Adjustment Act with legislation which would not be invalidated by the Court (312, nos. 1220-36, 1296-36, 1409-36, 1237-36).

The fact that Congress, working with the Department and farm leaders, took immediate action to replace the Agricultural Adjustment Act is a testimony to its political success.

Farmers had enjoyed a striking increase in farm income during the period the Agricultural Adjustment Act had been in effect. Farm income in 1935 had increased by more than 50 percent over farm income during 1932. Rental and benefit payments contributed about 25 percent of the amount by which the average cash farm income in the period 1933-35 exceeded the average cash farm income in 1932. The payments not only increased farm income but helped to even it out among regions and commodities, serving as a kind of insurance for farmers in drought areas (237, pp. 2-11; 165, pp. 354-385).

Since the chief function of the payments was to serve as "a main-spring to the adjustment of production," an evaluation of the agricultural adjustment program's success would need to consider its effect on production and prices (237, p. 6). Farm prices of major commodities advanced markedly, but it is impossible to separate the effect of the program from the effects of the drought and to measure other complex factors such as the effect of processing taxes on prices received by farmers. It is also impossible to measure the effect of the adjustment program on business recovery. Economists have attempted to make estimates, but there was and is no agreement on the contributions of the program to increase farm prices and income or on the effect of the program on consumer prices.

Irrespective of disagreement on contributions of the program, there has been general agreement on the need for Government action to assist farmers during the unprecedented economic crisis of the early thirties. Modifications have been made in later programs of crop adjustment and in the committee system of administration, but the basic ideas of agricultural adjustment which were enacted into law in 1933 have survived periods of drought, of inflation, of war, of reconversion from war, and of changes in political party leadership in both the Congress and the executive branch of the Government.

¹ 48 Stat. 31.

² 48 Stat. 528; 48 Stat. 670; 49 Stat. 750.

³ Personnel Records of U.S. Department of Agriculture, Federal Records Center, St. Louis.

⁴ Memorandum, Chester C. Davis to George N. Peek, Aug. 19, 1933, in Production Control Files of Agricultural Adjustment Administration in National Archives.

⁵ 48 Stat. 598.

⁶ Federal Surplus Relief Corporation was chartered by the State of Delaware on Oct. 4, 1933.

⁷ 48 Stat. 1275.

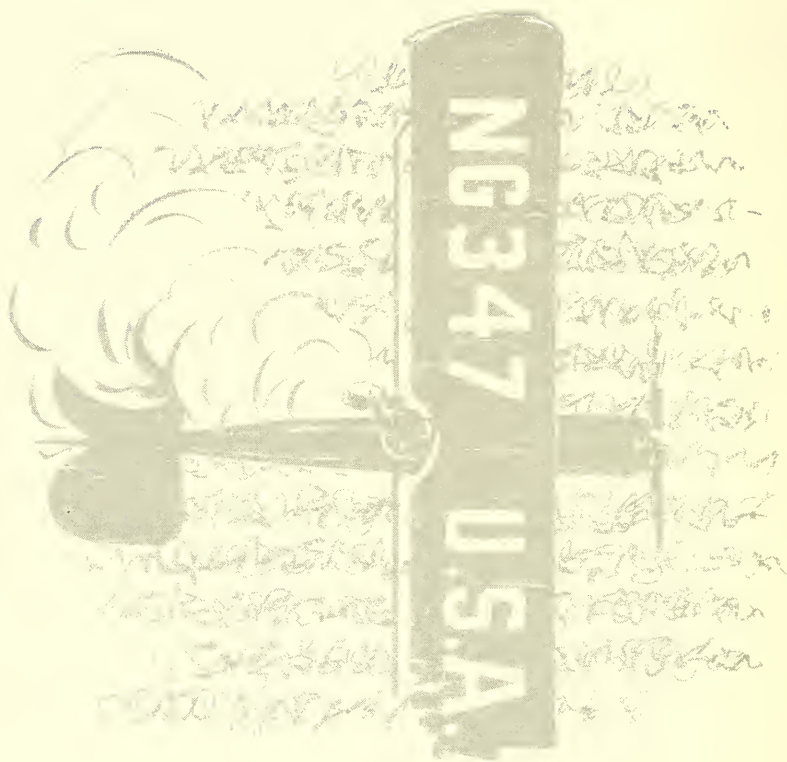
⁸ 49 Stat. 750.

⁹ Memorandum, Frederic C. Howe to F. J. Hughes, July 5, 1933, and Report on the Activities of the Consumers' Counsel of the Agricultural Adjustment Administration, Dec. 13, 1933 (8 pages typewritten).

¹⁰ Memorandum, Henry A. Wallace to George N. Peek, June 10, 1933; Notes on Interview with Frederick P. Lee, Jan. 22, 1943.

¹¹ Frederic C. Howe, Report on the Activities of the Agricultural Adjustment Administration, Dec. 13, 1933.

¹² *United States v. Butler*, 297, U.S. Reports 1.



*The battle against insects
was aided by airplanes.*

Protecting the Soil, Farm Incomes, and Food Supplies, 1935-1940

The Supreme Court invalidated the Agricultural Adjustment Act on January 6, 1936. Department and farm leaders reacted with shock and anger, declaring that farm adjustment was not dead.

President O'Neal of the American Farm Bureau Federation called those who had attacked the agricultural adjustment program in congressional hearings and in the courts "enemies of the Republic." On February 4, O'Neal declared:

There will be neither surrender nor compromise, as we move forward. . . . The principle of farm adjustment, in terms of supply and demand is not dead. . . . In fact, only the legal clothes of farm adjustment have been declared unsuitable (*18, Jan. 7, Feb. 4, 1936; 312, no. 1265-36*).

In a letter to Secretary Wallace, 101 Iowa farmers declared:

The vehicle by which the accomplishments were made possible has been discarded, but the spirit which drove that vehicle is still here, more determined than at any time the AAA was in operation. That spirit which sent our forefathers across the Alleghenies, which conquered the forest and prairies of the Middle West has been passed on to their children and their children's children. That industry which we represent which has been and which is the backbone of our nation stands today deterred but by no means defeated. . . . We still have confidence in your leadership and pledge to you our . . . support. . . . It is our hope that this support and this action from the "folks back home" will give you renewed courage and renewed determination to carry on against all opposition. We would remind you that not only the future of our industry but the future of our country is in the balance (*312, no. 1296-36*).

In Congress there was talk of amending the Constitution, if necessary, to provide for the continuance of production control. Senator Pope praised the production control program for giving farmers the same advantages in production and marketing enjoyed by industry and stated:

Nevertheless, the Supreme Court has placed agricultural production beyond the will of Congress. Nature has placed it beyond the power of States. It seems, therefore, appropriate to go to the root of the problem, the judiciary, for a solution (271, *Feb. 3, 1936*).

The immediate reaction of protest and shock was quickly replaced by one of determination "to repair the damage to agriculture and to conserve the general welfare."¹ Alerted to the possibility of an unfavorable decision by the invalidation of the National Industrial Recovery Act on May 27, 1935, Department officials had worked out a variety of plans which could be presented to Congress, and had worked with Congress to draw up the amendments of August 24, 1935, which were designed to insure constitutionality of the act. These amendments had attempted to save the act by providing a clearer definition of, and limitations on, the authority delegated to the Secretary. The Secretary felt a new approach satisfactory to the Court's constitutional interpretation had to be found before the spring planting season.

Conservation Approach Recommended

Secretary Wallace decided on January 6, the day of the Court's decision, that farm organization representatives should be called to Washington to advise the Department (312, *no. 1265-36*). Seventy farm leaders met on January 10 and 11 to help the Department draw up a new farm program for consideration of Congress. In the meantime, the Department had begun to work out a plan to pay farmers for voluntarily shifting acreage from soil-depleting surplus crops into soil-conserving legumes and grasses. This type of program was in line with plans to adapt the agricultural adjustment program to longtime soil conservation objectives.² The Program Planning Division of the Agricultural Adjustment Administration had recommended that soil conservation be adopted as a major objective of the adjustment program (236, *pp. 1-29*; 238, *pp. 1-10*).

Studies had been made and meetings had been held with farmers and extension workers to formulate an adjustment program that could be adapted to regional differences and to the balanced farming and soil needs of localities and even of individual farms. Plans called for a gradual change from a relatively inflexible acreage control program based on past acreage of specific crops to one adjusted to good farm management and to land use needs. However, these plans had not called for abandonment of production adjustment.

The study which had been given to promoting soil conservation under the agricultural adjustment approach made it natural for the Department to turn to the soil conservation approach with the hope that payments for increased acreage of soil-conserving crops

would help to control the production of commercial soil-depleting crops. Since Congress had, on April 27, 1935, declared soil erosion a menace to the national welfare in a law directing the Secretary of Agriculture to establish a Soil Conservation Service,³ the logical immediate step was to recommend that this law be amended to provide direct payments to farmers for voluntarily planting soil-conserving crops.

Speaking to the representatives of farm organizations on January 10, Secretary Wallace expressed the hope that all programs proposed by the conference would recognize both the welfare of the consumer and the longtime conservation of the soil. He spoke of the 50 million surplus acres whose products no longer had a market, or only a poor one.

The problem of 50 million surplus acres, gentlemen, is still with us. Neither the drought of 1934 nor the AAA programs of '34 and '35 have caused them to disappear. . . . They are as much the concern of business as of agriculture. They are a national problem. We believe that a plan can be devised which will use these 50 million acres in such a way as to serve the long-time welfare of the farmer, the consumer, and the voiceless land (*312, no. 1237-36*).

Representatives attending the conference reached unanimous agreement on recommending legislation to provide for the rental and withdrawal from commercial crop production of the land necessary to promote soil conservation, and to bring about a profitable balance of domestic production with effective demand. Other recommendations included the maintenance and strengthening of valid parts of the Agricultural Adjustment Act, particularly those parts authorizing marketing agreements and orders and Section 32, which authorized the use of 30 percent of the custom receipts for surplus removal (*312, no. 1265-36*).

Soil Conservation and Domestic Allotment Act of 1936

Congress adopted the soil conservation and good farm management approach to the farm problem in the Soil Conservation and Domestic Allotment Act.⁴ This act, passed as an amendment to the April 27, 1935, legislation on soil erosion control, was approved on February 29, 1936, just 54 days after the invalidation of the Agricultural Adjustment Act. The purpose of the new act was stated:

To promote the conservation and profitable use of agricultural land resources by temporary Federal aid to farmers and by providing for a permanent policy of Federal aid to States for such purposes.

The term "temporary Federal aid to farmers" was used because the act originally authorized the Secretary to make direct payments to farmers only until January 1, 1938. Beginning in 1938, the Federal Government was to make grants to States for distribution by a State agency under plans approved by the Secretary. This provision for operation through grants to States was apparently included to insure the constitutionality of the act. It was pointed out that Federal grants to States for education, roads, and other purposes had been accepted as within the general welfare clause of the Constitution (89; 292; 271, *Feb. 6, 7, 1936; 18, Feb. 18, 1936*). The date for transfer of the administration of this conservation program to the States has been repeatedly extended by Congress.

The objective of soil conservation was linked with a second major objective which, as expressed by President Roosevelt, was

... the reestablishment and maintenance of farm income at fair levels so that the great gains made by agriculture in the past 3 years can be preserved and national recovery can continue (187, *vol. 5, p. 95*).

The act stated as Government policy the reestablishment of the ratio of purchasing power of the net income per person on farms, and that of the income per person not on farms, to that which prevailed during the 5-year period August 1909–July 1914. This goal was to be approached at as rapid a rate as practicable and in the general public interest. This was the first use of parity income as an objective of agricultural legislation.

President Roosevelt defined the third major objective of the act as "the protection of consumers by assuring adequate supplies of food and fibre now and in the future." The law specified that the powers granted should not be used to discourage production sufficient to maintain normal domestic human consumption as measured by such consumption in the years 1920 to 1929, adjusted for changes in population and other factors.

Stressing the voluntary nature of the program authorized, the law specifically excluded the power to enter into any contract or to acquire any land. Payments were to be made to agricultural producers, including tenants and sharecroppers, upon submission of proof that prescribed conditions had been met.

Changes in Washington Office of AAA

With the shift in the program from an individual commodity approach to a regional soil conservation approach, the Agricultural Adjustment Administration's national office was reorganized into five regional divisions: Northeast, East Central, Southern,

North Central, Western, and an Insular Division. The Marketing and Marketing Agreements Division, the Division of Finance, the Division of Information, the Program Planning Division, and the Consumers' Counsel Division were continued, as was the Sugar Section (312, no. 1564-36). State, county, and community committees were used in the administration of the agricultural conservation program; the extent of their participation varied by regions as formerly under the agricultural adjustment program (238, pp. 53-60; 324, pp. 5-7).

Howard R. Tolley, who, as head of the Program Planning Division, had taken the leadership in studying ways of providing more flexibility in the agricultural adjustment program to adapt it to better land use and balanced farming needs, became Administrator of the Agricultural Adjustment Administration on June 24, 1936, when Chester Davis' resignation, to become the member of the Federal Reserve Board representing agriculture, became effective.⁵ Tolley had served as Acting Administrator while Chester Davis surveyed trade conditions in Europe at the request of President Roosevelt (312, nos. 1534-36, 1539-36).

Programs Under Soil Conservation and Domestic Allotment Act

As Acting Administrator, Tolley, with other officials of the Department, had discussed broad outlines of the program at regional meetings of farmers and farm representatives during the first part of March.⁶ The 1936 program was launched March 20, immediately following the appropriation of funds by Congress on March 19. Under the new program, crops were generally divided into two categories, "soil depleting" and "soil conserving" (238, pp. 1, 40-41, 153-192). Soil-depleting crops were intensively cultivated row crops, and included those classified as basic under the Agricultural Adjustment Act of 1933. Soil-conserving crops included grasses, legumes, and green manure crops which maintain soil fertility and do not contribute directly to building up price-depressing surpluses. Certain uses of land were classified as "neutral."

A soil-depleting base, defined as the total acreage of soil-depleting crops on the farm in 1935, was established for each participating farm. Soil-conserving bases were also used in the 1937 program. Farmers were offered soil-conserving payments for shifting acreage from soil-depleting to soil-conserving crops. Soil-building payments, made for seeding soil-building crops on cropland and for carrying out approved soil-building practices on cropland or pasture, were also offered. During 1936, a fiber flax

program was inaugurated to provide payments for growers producing and selling flax straw for the production of fiber.

The new program was adapted to regional differences. A special range-improvement program to help ranchers work out better grazing methods for rangelands under their control was announced on September 9, 1936 (*312, no. 444-37*).

In meeting its objective of increasing soil conservation as measured by increased acreage of soil-conserving crops and increased use of soil conservation practices, the programs of 1936 and 1937 were considered a success by the Department and by farm organization leaders (*238, pp. 46-49; 239, pp. 166-169; 18, Dec. 22, 1936; 217*). The soil conservation program of 1936 cushioned the effect of the severe drought of 1936 by encouraging increased supplies of grasses and legumes. It not only provided feed for livestock, but decreased the severity and extent of duststorms. The payments contributed greatly needed income to farm families in the drought area, serving as a kind of disaster insurance. However, the agricultural conservation program did not eliminate the need for special emergency drought-relief programs.

Drought Relief

By the end of 1936, drought areas had been designated in 1,194 counties in 25 States. An interdepartmental Great Plains Drought Area Committee, the Secretary of Agriculture serving as its chairman, was appointed by the President on July 22, 1936, to coordinate and accelerate the drought-relief activities of the various Government agencies (*340, p. 2*). This committee was succeeded on September 17, 1936, by the Great Plains Committee (*339, p. 136*). An interagency committee, headed by an Assistant Administrator of the Agricultural Adjustment Administration, was appointed to coordinate drought-relief work in the Department of Agriculture. Drought-relief measures included granting reduced freight rates; making livestock, feed, and transportation loans; and cattle and sheep purchase programs. The soil conservation program was modified to encourage an increase in the production of needed food and feed crops in the drought area (*238, pp. 90-91*).

A 1936-37 corn-loan program was offered to farmers after it became evident that the drought would sharply reduce production. Its primary objective was to insure a sufficient supply of seed corn. Loans were offered on farm-stored seed corn and on good quality and properly stored cribbed corn which could be sorted for seed at a later date (*238, p. 93; 18, Sept. 29, 1936*).

Following the completion of a survey of conditions in the drought States, President Roosevelt stated, "it is time to begin using the

economical principle of insurance to lessen the financial and human costs of drought in the future" (187, vol. 5, p. 368).

In a letter to Secretary Wallace dated September 19, 1936, President Roosevelt appointed him to serve as chairman of a Crop Insurance Committee. The committee's assignment was to work out permanent measures for guarding consumers and farmers against drought disasters. The President suggested that crop insurance combined with a system of storage reserves should operate so that surpluses of fat years could be carried over for use in lean years (346, p. 15).

Drive for a Comprehensive Farm Program

Curtailment in crop production due to the drought in 1936 tended temporarily to obscure the fact that planted acreage of the crops which had been classified as basic increased despite the soil conservation program (238, pp. 10-11). The recurrence of normal weather, crop surpluses, and declining farm prices in 1937 focused attention on the failure of the conservation program to bring about crop reduction as a byproduct of better land utilization.

Although the soil conservation program had helped to alleviate the effects of the drought, had curtailed somewhat the acreage of surplus crops as compared with acreage planted before 1933, and had contributed to farm income by making conservation payments, it had not solved any of these major problems. Officials in the Department of Agriculture and farm organization spokesmen pressed Congress for additional legislation. Secretary Wallace stressed the need for an ever-normal granary combined with commodity loans, and for crop insurance to cushion the effect of future drought periods on farmers and consumers. In March 1937, he wrote:

... it will be necessary after supplies under the loan program have reached a certain point to keep the granary from running over by some practical program of production adjustment. I call this part of the ever normal granary program "storing the grain in the soil" instead of "storing it in the bin" (312, nos. 1606-37, 1142-37; 367).

The American Farm Bureau Federation, while agreeing on the desirability of crop insurance and an ever-normal granary, pressed for production and marketing controls and for loans at levels high enough to bring parity returns to farmers (18, Apr. 13, 1937).

The use of commodity loans to be made whenever crops became large enough to make possible the accumulation of reserve supplies, and when loans were needed to put a "plank under farm prices," was presented by Secretary Wallace as the workable approach at a meeting of farm organization leaders held February 8, 1937.

Accumulation of reserves in the ever-normal granary was to be the first step to the solution of the surplus production. When the granaries were filled to overflowing, as measured by 10 or 15 percent higher than normal carryover, the next step was to offer "conditional payments" in addition to the regular conservation payments for use of land which would "store fertility in the soil" for use in succeeding years when supplies might be below normal. When a succession of favorable years made this combination of programs inadequate, direct production control was to be used (312, no. 1142-37).

Enactment of General Legislation Delayed

Though several bills providing for loans, storage of commodities, and crop and marketing controls were introduced, general legislation was delayed until 1938. However, two less comprehensive laws were passed during 1937—the Agricultural Marketing Agreement Act of 1937, approved on June 3, 1937, and the Sugar Act of 1937, approved September 1, 1937.⁷ Although the marketing agreements and order provisions of the Agricultural Adjustment Act of 1933, as amended in 1935, had not been invalidated by the Supreme Court's decision, it was considered advisable to secure specific separate legislative authorization. The new legislation did not provide for any major program changes.

The Sugar Act of 1937 replaced the Jones-Costigan Sugar Act which had not been specifically invalidated by the Court's decision, yet was believed by Department officials to be vulnerable to a similar ruling. A joint congressional resolution had been passed in June 1936 continuing the quota provisions of the Jones-Costigan Act until December 31, 1937, but discontinuing the processing tax and contract provisions. The Sugar Act of 1937 provided for quotas; the imposition of excise taxes; and conditional payments requiring conformance with certain standards with respect to child labor, wage rates, and the preservation of soil fertility.

As surpluses mounted in 1937 and the business recession of that year deepened, pressure for new legislation increased, but Congress was faced with varying viewpoints and with the technical difficulty of drafting effective control legislation which would meet the standards of the Supreme Court. A decision was made during August 1937 to defer action on permanent agricultural legislation, but to make it the first order of business when Congress reconvened (271, Aug. 21, 1937). A joint resolution formalizing this decision was passed by Congress and approved by the Presi-

dent on August 24, 1937.⁸ The resolution stated that a permanent farm program should provide a replacement for the crop-adjustment methods of the Agricultural Adjustment Act, protect farmers and consumers against the consequences of drought, and "safeguard farmers and the business of the Nation against the consequences of farm price decline" (271, Aug. 13, 1937).

Congress took more immediate action to raise the income of cotton producers who were faced with a recordbreaking crop and had suffered a marked decline in prices. On August 25, 1937, Congress directed that \$130 million of Section 32 funds be used for price-adjustment payments to 1937 cotton producers who agreed to cooperate in the 1938 agricultural adjustment program which was to be formulated.⁹

The price-adjustment payments, not to exceed 3 cents a pound, were to be large enough to bring the returns to cotton farmers up to 12 cents a pound. The loan rate was set at approximately 9 cents per pound to assure cooperating growers of a return approximating 12 cents. Secretary Wallace had been reluctant to offer a loan program without assurance of new legislation to control agricultural surpluses (271, Aug. 13, 1937). This understanding had been formalized with the passage of the joint resolution, approved August 24, 1937.¹⁰

Agricultural Adjustment Act of 1938

The Agricultural Adjustment Act of 1938, which Secretary Wallace called a new charter of economic freedom for farmers and economic protection against scarcity for consumers, was approved on February 16, 1938 (312, no. 1278-38).

The 1938 Agricultural Adjustment Act attempted to combine in one permanent program the best features of each of the earlier programs and to insure that they would not be ruled outside the powers of Congress by the Supreme Court. The new legislation not only retained the valid features of the old, but added new features to meet drought emergencies as well as price and income crises resulting from surplus production.

To meet the constitutional test, marketing control was substituted for direct production control and authority was based on congressional power to regulate interstate and foreign commerce. Violent fluctuations in supplies, marketing, and the prices of farm commodities were to be minimized. Consumers were to be protected by the maintenance of adequate reserves of food and feed. The act stated that the policy of Congress was to assist farmers in obtaining, so far as practicable, parity prices and parity income. The base period used in determining parity prices was that of

August 1909 to July 1914, except for tobacco which was August 1919 to July 1929. A provision of amendments made in 1935 to the original law, that parity prices were to reflect interest payments, taxes, and freight charges, was reenacted in the 1938 law. Since freight charges were already included in local market prices paid by farmers, it has never been necessary to include separate series on freight charges in parity index determinations.

Congress retained conserving the Nation's soil resources as a major objective, and reenacted the Soil Conservation and Domestic Allotment Act with some modifications, as a major part of the new legislation. Modifications of the reenacted Soil Conservation and Domestic Allotment Act included provision for acreage allotments for corn, cotton, rice, tobacco, and wheat; specific directions with respect to the establishment and use of State and local committees; provisions to safeguard tenants' share of payments; special provisions on the allocation of payments; a provision for increasing the size of payments on small farming operations; a limitation of \$10,000 on the size of payments; and a special amendment for the protection of dairy, livestock, and poultry producers from undue competition resulting from the conservation program.

The new features of the legislation were stressed by Secretary Wallace as the ever-normal granary plan of balanced abundance. These included loans for cooperating producers of corn, wheat, and cotton under certain supply and price conditions, if marketing quotas had not been rejected, and loans at the option of the Secretary for producers of other commodities; marketing quotas to be proclaimed for five commodities when supplies on the farm, in marketing channels, and in storage reached certain levels; referendums to determine whether the marketing quotas proclaimed by the Secretary should be put into effect; and crop insurance for wheat.

The nonrecourse loans were to serve the dual purpose of placing a plank under farm prices when threatened by a slump, and of financing farmers in holding surplus supplies until they were needed. Secretary Wallace stressed encouragement of systematic storage as a basic part of his ever-normal granary plan. Others stressed the price-supporting effect of the loan and payment provisions of the act.

The Secretary felt it important that the loan rate not be high enough to discourage marketing, particularly the marketing of export crops. The formula eventually adopted by Congress provided loans at rates ranging from 52 to 75 percent of parity. A loan program was mandatory for cotton and wheat if the price was below 52 percent of parity at the close of the crop year, or if the production was in excess of a normal year's domestic consumption and exports. On cotton and wheat loans, the Secretary, subject to the approval of the President, was given discretion in the determination of the rate at a level no lower than 52 percent nor

higher than 75 percent of parity. A more complex formula regulated corn loans with the loan rate graduated in relation to the expected supply, and with 75 percent of parity loans available when production was at or below normal as defined in the act. Loans were to be available for cooperating corngrowers in any year when the November estimate of production exceeded a normal year's domestic consumption and exports, or when the November 15 price was below 75 percent of parity. Loans for commodities other than corn, wheat, and cotton were authorized, but their use was left to the Secretary's discretion.

Commodity loans had been used in the earlier adjustment program as an emergency device to raise farm income, but were not given specific legislative authorization.

Under certain specified supply conditions, marketing quotas with penalties for marketing wheat, corn, cotton, tobacco, and rice in excess of quotas were to be proclaimed by the Secretary, but not to be effective unless favored by two-thirds of the producers voting in a referendum.

Marketing quotas with penalties had been used for cotton and tobacco under authorization of the Bankhead Cotton Control Act of 1934 and the Smith-Kerr Tobacco Act of the same year, but these acts were considered to be emergency measures of limited duration. The new act was the first to direct the use of marketing quotas for corn and wheat under certain supply conditions.

Referendums had been used for quota control under these acts. Referendums had also been used to aid administrators in decisions on wheat and corn programs, but they had not been required by law.

The act directed the Secretary to make parity payments, if funds were appropriated, to producers of corn, wheat, cotton, rice, or tobacco on the basis of their normal production of these commodities in amounts which would provide a return as nearly equal to parity as the available funds would permit. These payments were to be in addition to, and not in substitution for, any other payments authorized by law.

An appropriation of \$212 million for parity payments was made by the Price Adjustment Act of 1938, approved June 21, 1938, as Title V of the Work Relief and Public Works Appropriation Act of 1938.¹¹

Other provisions of the Agricultural Adjustment Act of 1938 included authorization for the establishment and maintenance of four regional research laboratories to develop new uses for farm products, giving primary attention to surplus commodities, and authorization for the Secretary of Agriculture to prosecute freight rate cases affecting the transportation of farm products before the Interstate Commerce Commission. The act also extended the life of the Federal Surplus Commodities Corporation which had been established as the Federal Surplus Relief Administration in 1933.

Adjustment Programs in Operation

Department officials moved quickly to activate the new legislation to avert a serious depression which was threatening to engulf farmers and city people alike. "The interplay of unemployment in the cities and falling income on the farm" had to be checked again (312, no. 546-39). Acreage allotments were in effect for corn, cotton, and tobacco harvested in 1938. The legislation was too late for acreage allotments on wheat harvested in 1938 because most of this wheat had been seeded in the fall of 1937. Marketing quotas were in effect during 1938 for cotton and for flue-cured, Burley, and dark tobaccos. Marketing quotas could not be applied to wheat since the act prohibited their use during the 1938-39 marketing year, unless funds for parity payments had been appropriated prior to the time for proclamation of quotas. Supplies of corn were under the level which required proclamation of marketing quotas.

Programs for cotton and corn were credited with holding supplies in line, preventing substantial additions to the surpluses piled up during 1937. Wheat production for 1938 exceeded the level for 1937 (240, pp. 16-17, 21-22; 312, 546-39).

With falling farm prices, the nonrecourse loans made to cotton, corn, and wheat farmers, and the payments were important factors in sustaining farm income. Secretary Wallace credited the cotton loan programs of 1937 and 1938 with preventing a collapse in cotton prices. He estimated that the price of cotton would have fallen to 4 or 5 cents a pound without the loan and acreage programs. The loan rate for 1938 was 8.3 cents a pound, representing 52 percent of parity (312, nos. 457-39, 223-39). Nonrecourse loans also helped to bolster corn and wheat prices and enabled farmers to hold these commodities off the market for redemption when prices reached higher levels.

Farm income was bolstered by conservation program payments and by the 1937 cotton price adjustment payments. The cotton payments were made to producers who furnished proof of compliance with the 1938 program.

Special payments were made in 10 States to farmers who cooperated in a program to retire land unsuited to cultivation as part of a restoration land program initiated in 1938. Payments were made for restoring land to its native vegetative cover (240, p. 19).

The agricultural adjustment program did not become fully operative until the 1939-40 marketing year, when crop allotments were available to all farmers before planting time. Commodity loans were available in time for most producers to take advantage of them. Corn loans were of particular importance to corn producers, since the use of hybrid corn and technological developments

had resulted in the highest yield since 1920 on planted acreage which was well within the national goal. Farmers were allowed to reseal corn which was in storage under previous loan programs (242, pp. 33-36).

Parity payments were made to the producers of cotton, corn, wheat, and rice who cooperated in the program. They were not made to tobacco producers because tobacco prices exceeded 75 percent of parity. Appropriation legislation prohibited the use of funds for parity payments if payments would bring returns above 75 percent of the parity price.

Although marketing quotas were proclaimed for cotton and rice, and for flue-cured, Burley, and dark air-cured tobaccos for the 1939-40 marketing year, only cotton quotas became effective. More than a third of the tobacco and rice producers participating in the referendum voted against quotas. Legislation, approved August 7, 1939, changed quotas for tobacco on each farm from a fixed number of pounds to actual production on allotted acreage.¹² Without marketing quotas, flue-cured tobacco growers produced a recordbreaking crop and found themselves faced with a sharp reduction in foreign markets due to the withdrawal of British buyers about 5 weeks after the markets opened. The loss of this outlet caused a shutdown in the flue-cured-tobacco market. During this crisis period, growers approved marketing quotas for their 1940-41 crop and the Commodity Credit Corporation, through a purchase-and-loan agreement, restored buying power to the market.

The program for sugar was also affected by the outbreak of war in Europe. Following a wave of sugar buying in the United States, sugar quotas were suspended on September 11, 1939, by Presidential proclamation. They were reinstated on December 26, 1939.

In addition to those for sugar, cotton, and tobacco, marketing quotas were in effect for the 1941 crops of wheat and peanuts. Marketing quotas for peanuts had been authorized by legislation approved on April 3, 1941.¹³

In response to increased demand for production of certain food supplies for defense and lend-lease needs, significant changes were made in the conservation and adjustment programs during the 1940-41 crop year. Farm prices for some commodities approached the parity goal. Cash farm income during the calendar year 1941 increased 29 percent over that in 1940. Increased industrial activity and the lend-lease program were major contributing factors.

Direct Government payments were an important part of the income of producers of cotton, corn, wheat, tobacco, and rice during the period 1936 through 1941. They reached their highest levels in 1939 when they were equal to 35 percent of net cash income farmers received from the sale of their crops and livestock (281, p. 6).

Participation in the programs of the Agricultural Adjustment

Administration steadily increased. During 1941, around 6 million farmers cooperated and approximately 81 percent of the cropland was covered (243, p. 4).

Crop Insurance Program

The all-risk crop insurance program, initiated on wheat only in 1938, and thus experimental with respect to crops but not limited in area, was established as a separate program but was closely related to the adjustment and conservation programs. Its objective was to protect wheat producers from the hazards of crop failures from unavoidable causes, while the adjustment program protected them from the hazards of surpluses and depression prices. Insurance in kind and the holding of premium reserves in wheat linked crop insurance plans to the ever-normal granary reserves to be built up through commodity loans of the adjustment program.

Reasons for the failure of private attempts to provide all-risk crop insurance and the feasibility of undertaking a Federal program had been studied by the Department and investigated by Congress for more than a decade. As early as 1915, a Department specialist had carried on studies of the problems encountered by private insurance companies. During 1922, the Department of Agriculture issued a bulletin entitled *Crop Insurance: Risks, Losses, and Principles of Protection*. The same year, a Senate committee was appointed to determine the advisability of creating a crop insurance bureau in the Department of Agriculture. During 1928, Secretary Jardine reported, in response to a Senate resolution, that insufficient factual information existed to determine whether crop insurance was practicable or under what conditions it should be issued.

The factual information for an actuarial foundation was provided primarily by the detailed acreage and production records collected for the adjustment program. Using these records for selected counties, research work was started by William H. Rowe in the Division of Agricultural Finance of the Bureau of Agricultural Economics. Out of this study came not only some knowledge of the premium cost necessary for crop insurance but a plan of insurance differing in several ways from earlier unsuccessful private insurance attempts. Under the "insurance in kind" feature, only physical production was guaranteed, such as a certain number of bushels of wheat. If the farmer failed to produce that quantity, he could be paid in wheat or an equivalent in cash, and he could also pay his premium in wheat (192, p. 1). Private companies had offered insurance on the basis of a guaranteed income per acre; this resulted in severe losses from price declines.¹⁴ Secretary Wallace was particularly interested in the insurance in kind feature

because it would fit in with his broader plans of an ever-normal granary.

The widespread droughts of 1934 and 1936 generated much public interest in the idea of crop insurance and provided a stimulus for action. The President appointed a committee to study it in 1936. The committee met with representatives of farm groups, insurance groups, and others.

In its report on December 23, 1936, the committee proposed, among other things: (1) Insurance of crop yields only with payment of premiums and indemnities in kind or the cash equivalent; (2) insurance of wheat only at first, with research in anticipation of insurance on other crops later.

Much of the Department's work in getting public understanding of the proposed program, including extensive testimony before committees of Congress, was done by Roy M. Green, who at that time was serving as the head of the Division of Agricultural Finance. The Federal Crop Insurance Corporation, with an authorized capital stock of \$1 million, was created by Title V of the Agricultural Adjustment Act of 1938. It was established as an agency of and within the Department of Agriculture.

The management of the Corporation was vested in a Board of Directors subject to the general supervision of the Secretary of Agriculture. The Secretary was to appoint three employees in the Department as Board members. The Directors of the Corporation were to hold office at the Secretary's pleasure and were to receive no additional compensation for their work. The Manager of the Corporation was to be appointed by the Board, subject to the approval of the Secretary of Agriculture.

Secretary Wallace, on February 19, 1938, appointed Under Secretary M. L. Wilson, Assistant Administrator of the Agricultural Adjustment Administration Jesse W. Tapp, and Assistant to the Secretary Rudolph M. Evans as Directors of the Corporation.¹⁵ Roy M. Green was selected for the full-time position of Manager of the Corporation. He resigned effective August 1, 1938, and Leroy K. Smith, who had been in charge of the crop insurance activities for the North Central Region of the Agricultural Adjustment Administration, became the next Manager. He served in this position until 1943.¹⁶

Since the crop insurance program was closely related to the agricultural adjustment program, and since the Agricultural Adjustment Administration had an established field organization which worked directly with farmers, arrangements were made for the Agricultural Adjustment Administration to assume responsibility for field administration of the crop insurance program. Agreements were signed by the two agencies on April 15 and July 1, 1938 (334, p. 10). Until January 3, 1939, State and county crop-insurance supervisors were responsible to the Corporation and to the Agricultural Adjustment Administration. After this date, fieldwork involving the writing of policies and adjustment

of losses was placed directly under the supervision of the State and county committees of the Administration. Three branch offices of the Corporation, located at Kansas City, Minneapolis, and Washington, D.C., were limited to work involving approval of yields and premium rates, auditing of policies and receipts, writing of policies, purchase and storage of grain, audit of adjustments, and computation of cash equivalent settlements (75, 1939, pp. 3, 11).

The wheat crop-insurance program was officially launched at a national meeting at Omaha, Nebr., on April 19 and 20, 1938. This meeting was followed by a series of State, district, county, and community meetings (75, 1939, p. 5). Wheat crop insurance was offered on the basis of either 75 percent or 50 percent of the average yield of the individual farm, but relatively few farmers applied for 50 percent. Premiums and indemnities were computed in bushels of wheat, but both could be settled on a cash-equivalent basis. Premiums paid in cash were invested in wheat so that a bushel of premium would always pay a bushel of loss. Losses were paid with certificates for wheat, and if the farmer wanted the cash, the wheat was sold for him. To be eligible for insurance during the first 2 years of the program, applicants for crop insurance were required to follow soil conservation practices. The crop insurance program was also related to the general farm program by the Corporation's ruling that insurance coverage could not be extended to any acreage in excess of the allotment or permitted acreage for the farm.¹⁷

The crop insurance program was further related to the agricultural conservation program by a provision that advances out of payments to be earned under the conservation payment could be used for the payment of insurance premiums. This provision, authorized March 25, 1939, by an amendment to the Soil Conservation and Domestic Allotment Act, became effective before the final date for payment of premiums for 1939 spring wheat insurance.¹⁸ Approximately 95 percent of all premiums for 1940 and 1941 wheat crop insurance were paid by means of advances.

The ease of payment was one important factor in the increased participation in the 1940 program. The number of contracts more than doubled over 1939, and the insured acreage increased by about 80 percent.

The 1942 crop insurance program was extended to include cotton.¹⁹ The cotton crop insurance program was officially launched on January 5, 1942, at a national meeting at Memphis, Tenn. (75, 1942, p. 107). A 3-year contract was used for the first time for 1943 wheat. Adjustments had to be made in both programs to include certain war hazards. A non-interest-bearing commodity note for premium payments was used for the first time. The maturity date of the commodity note was late enough to permit the insured producer to pay for his insurance out of the harvest of the insured crop. The commodity notes made up the reserves for the

Corporation during the growing season, and this enabled it to save on storage charges. The actual commodity was not purchased until the note matured.

The number of wheat insurance contracts increased during 1942, but the amount of insured acreage declined by about 18 percent. Insurance coverage increased in the low-risk low-premium areas and decreased in the high-risk high-premium areas of the Great Plains.

Indemnities paid each year, 1939 through 1942, exceeded premiums. Based on figures in bushels of wheat, they exceeded premiums by 52 percent in 1939, by 66 percent in 1940, by 49 percent in 1941, and by 21 percent in 1942. Because of heavy losses of the Corporation during its first 4 years of operation, Congress decided to call an abrupt halt to the crop insurance program. The 1944 Appropriation Act for the Department of Agriculture restricted use of crop insurance funds to liquidation of contracts for crops planted prior to July 31, 1943.²⁰

President Roosevelt expressed disagreement with the decision of Congress to liquidate crop insurance work. When he signed appropriation legislation for the Department, he said he hoped funds would be appropriated for crop insurance when Congress returned from recess. In his judgment, insufficient time had elapsed to demonstrate the practicability of crop insurance (75, 1943, pp. 4-5).

Direct Distribution of Surplus Commodities

Crop insurance has been presented as a type of social security for farmers to protect their income from the hazards of drought and other uncontrollable natural disasters (75, 1943, p. 2). City unemployment with its reduction in purchasing power was another disaster which affected farm income. The paradox of hungry people and surplus food had shocked the nation. One official of the Department called this underconsumption "the black plague of the twentieth century" (171).

With the establishment of the Federal Surplus Relief Corporation, October 4, 1933, the Department of Agriculture and the Federal Emergency Relief Administration launched a joint attack on farm surpluses and city poverty. The first activity of the Corporation was the distribution to needy families of surplus pork, dairy products, and wheat. The major program of the Corporation in 1934 was assisting in the large drought-relief purchases of cattle, calves, sheep, and goats. During the first year of operation, commodities donated by the Agricultural Adjustment Admin-

istration were valued at approximately \$107 million. In addition, the Corporation spent approximately \$115 million of State relief funds in purchasing, shipping, processing, storing, and distributing agricultural products.

During the period October 4, 1933, through December 31, 1935, the Federal Surplus Relief Corporation and its successor, the Federal Surplus Commodities Corporation, shipped approximately 281,000 carloads of commodities.

With the inclusion of Section 32 in the August 24, 1935, amendments to the Agricultural Adjustment Act, the program to distribute surplus agricultural commodities received a continuing source of funds and became part of a long-range agricultural policy. At the first meeting of the Board, the Federal Emergency Relief Administrator resigned as President of the Corporation and was replaced by Chester C. Davis, the Administrator of the Agricultural Adjustment Administration. The charter was amended to specify that the Secretary of Agriculture, the Administrator of the Agricultural Adjustment Administration, and the Governor of the Farm Credit Administration should be members of the Board of Directors. The direction of the Corporation was thus transferred to the Department of Agriculture, where it was operated as a subsidiary of the Agricultural Adjustment Administration. An adverse ruling of the Comptroller General on the use of Section 32 funds to purchase commodities for donation to the Corporation led to enactment of supplementary legislation on February 11, 1936, to provide a specific authorization. On June 28, 1937, the Corporation's life was extended through June 30, 1939, as an agency of the United States under the direction of the Secretary of Agriculture. The Secretary was authorized to transfer Section 32 funds to the Corporation. On February 16, 1938, the Corporation's life was extended to June 30, 1942.²¹

In its attempt to help bridge the gap between agricultural surpluses on the farm and the food needs of millions of undernourished people, the Federal Surplus Commodities Corporation during a 4-year period had bought almost 3 billion pounds of surplus foods, which it had given to welfare agencies. The foods were purchased in carlots in the producing areas and shipped to various State relief agencies which distributed them to families eligible for public assistance. These foods included 932 million pounds of meat and fish; 565 million pounds of fruits; 450 million pounds of grain products; 450 million pounds of potatoes; 133 million pounds of cheese, dry skim milk, and evaporated milk; and 104 million pounds of butter, lard, and other fats (376).

While this program provided an important supplement to the diets of needy families and helped to move surplus farm products, it was recognized as inadequate for the solution of the farm income and underconsumption problems. These problems had been studied from the viewpoint of nutritional needs and agricultural production, consumer expenditures in relationship to consumer income,

and the relationship between the size of income and demands for various types of foods. These studies had focused attention on the interdependence of consumer income, adequate nutrition, and farm income. They had indicated that 14 percent of the families in the United States had only about 5 cents per person per meal to spend for food. It was estimated that if the incomes of all families getting less than \$100 per month could be raised immediately to that level, farmers would have received nearly \$1 billion more in income.

An alternative would be to develop programs for reducing food costs without reducing the already inadequate returns to farmers.

Food Stamp Program

Economists in the Department had been studying ways of reducing food prices by cutting marketing costs, since marketing costs accounted for more than half of the retail cost of food. They also studied ways of converting surplus foods into lower cost products, use of cheaper packaging, and elimination of more expensive processing and manufacturing to make more foods available to low-income consumers. The possibility of differential pricing or a two-price system to enable low-income families to purchase more of the food they needed and to provide a wider market for surplus food was also studied. Export subsidies had been used to sell wheat in the world market at lower prices. A two-price system had been used by dairy producers to sell fluid milk at higher prices than those received for milk used in manufacturing products.

By 1938, New York City was selling milk to low-income families for 9 cents a quart, compared with the regular market price of 14 cents a quart.

Frederick V. Waugh, in a January 21, 1938, memorandum to Secretary Wallace, proposed a graduated price program to increase the consumption of surplus foods. In earlier articles, he had developed the theory that consumer demand for a commodity could be made elastic through the use of discriminatory or graduated pricing. The graduated price proposal appealed to Secretary Wallace. He discussed the idea in press conferences and in speeches, calling it a two-price system. He spoke of expanding the home market and of domestic dumping as being preferable to foreign dumping.

Adverse reaction to the two-price label led to discussion of other names. The Secretary also found it necessary to stress that the plan was an addition to, and not a substitute for, the agricultural adjustment program. But there was great interest in alternative proposals for helping needy families buy more foods through the regular private channels of trade. During January 1939, Secretary Wallace appointed Milo Perkins President of the Federal

Surplus Commodities Corporation with specific instructions to develop a new surplus food disposal program.

After intensive study in the Department, frequent consultation with leaders of the organized food trade, and consultation with experts in other Government agencies and with congressional leaders, the food stamp program emerged. It was formally announced as an experimental program by Secretary Wallace and the chairman of the National Food and Grocery Conference Committee on March 13, 1939. On April 15, 1939, Rochester, N.Y., was designated as the first experimental city, and the stamp plan went into effect in Rochester on May 16, 1939.

Under the food stamp plan, families receiving public assistance were allowed to purchase orange-colored food stamps in amounts roughly equal to their normal expenditures for food. These stamps could be used to purchase any food at any grocery store. For every two orange stamps purchased, one blue stamp was given. The blue stamps could be used at any grocery store to buy foods listed by the Secretary of Agriculture as surplus. The regulations were amended on April 28, 1939, to authorize issuance of blue stamps without requiring the purchase of orange stamps in cases where cash-relief payments were so low that recipients could not buy the orange stamps. During October 1939, food stamps were made available to families with an income of less than \$1,000 per year, initially in Shawnee, Okla., as an experimental program. These families were required to buy orange stamps to receive the blue stamps for surplus foods. The list of surplus commodities was changed from time to time. Twenty different commodities were on the blue-stamp list at one time or another, but no more than 18 were listed in any 1 month.

Participation in the food stamp program reached almost 4 million persons in May of 1941 (*244, p. 12*). The aggregate cost of blue stamps to the Government was \$261 million, with the per-person-per-month grant ranging from \$2.09 to \$2.98.

The war economy, with its increased demand for food and its increased employment opportunities, resulted in a suspension of the food stamp program effective March 1, 1943 (*312, no. 1245-43*).

Cotton Distribution Programs

The wartime economy also resulted in the discontinuance during April and May of 1942 of a cotton stamp program which was modeled on the food stamp program. It had been initiated in Memphis and Shelby County, Tenn., on May 7, 1940, and later extended to other areas (*244, p. 17*).

The supplementary cotton program, which had made cotton

stamps available to cotton producers who reduced their cotton planting below their 1941 acreage allotment or 1940 measured acreage, was also discontinued during April 1942 (357, p. 23; 244, p. 17).

The cotton mattress program, another program initiated to increase the domestic consumption of cotton and to raise the standard of living of low-income farm and city consumers, was discontinued because of the wartime shortage of cotton ticking (283, 1943, pt. 2, p. 99; 167).

The Federal Surplus Relief Corporation had brought raw cotton and arranged for it to be made up into clothing, sheets, and mattresses during the latter half of 1934, the objective being to provide work for the unemployed and supplies for the needy, and to reduce cotton surpluses (45, pp. 60-66). During 1940, special attention was given to providing the material and the instruction so that low-income cotton producers, those with incomes of less than \$400 a year, could make their own mattresses (327).

School Lunch and School Milk Programs

The plight of cotton farmers without sheets and mattresses and of hungry adults, while surpluses of cotton and food piled up on the farms and in warehouses, shocked the Nation. But even more alarming was the plight of millions of hungry children. A nationwide dietary survey in 1935-36 had shown that 35 percent of the Nation's families had diets classified by the Bureau of Home Economics as "poor," and that 38 percent had diets classified as "fair." A National Health Survey conducted by the United States Public Health Service had shown that the Nation's children were concentrated in relief and low-income families. More than 70 percent of the children covered by the survey were in families with incomes below \$1,500 a year.

A nationwide school lunch program, providing a well-balanced nutritious meal a day for children from families whose incomes were too low to buy adequate food for home meals, offered an immediate and direct attack on the problems of malnutrition which were threatening to produce a generation of unhealthy adults. It offered an outlet for nutritious surplus foods which might otherwise be wasted, it provided an opportunity for learning good food habits and the principles of nutrition, and it could reach all children of school age.

School boards, charitable organizations, and cities in some areas had provided school lunches before the depression. Federal and State specialists in nutrition, home economics, extension, and health had carried on educational campaigns for the introduction of hot school lunches. Direct Federal assistance was not provided

until the depression dramatized the need during the 1930's and until development in the science of nutrition had called attention to the serious consequences of vitamin deficiencies.

Assistance from Federal agencies was first provided on an emergency basis, with emphasis on the provision of labor to prepare and serve the food. The Reconstruction Finance Corporation, the Civil Works Administration, and the Federal Emergency Relief Administration provided assistance on an emergency basis during the early 1930's. During this period, surplus food purchased by the Agricultural Adjustment Administration was available to the Federal Emergency Relief Administration.

With the establishment of the Works Progress Administration in 1935, school lunch work became a major project of the Division of Professional and Service Projects. The school lunch project served the dual objective of providing employment for needy people and of providing food for undernourished children. The availability of surplus foods on a continuing basis, following the enactment of Section 32 during 1935, greatly facilitated the expansion of school lunch programs sponsored by the Works Progress Administration and local organizations.

During August 1939, the Federal Surplus Commodities Corporation announced that it intended to secure a major expansion in the school lunch program with the objective of making lunches available for up to 5 million children, a fivefold expansion in the program (312, no. 351-40; 210, pp. 2, 3, 38). Special school lunch representatives were designated to visit local communities and assist in organizing school lunch programs. Where programs were in existence, information was given about the availability and method of securing surplus foods.²²

More than a fivefold increase in the number of children served and a tenfold increase in the use of surplus foods in school lunches was secured from 1939 to 1941. The number of schools participating increased from 14,075 during fiscal 1939 to 66,783 during fiscal 1941. The amount of foodstuffs contributed reached a monthly high of 56 million pounds during March of 1941. Children participating in the school lunch program represented about 17 percent of the 27 million enrolled in school. Approximately 29 percent of the schools had a school lunch program.

The school lunch program, which had served as a minor outlet for surplus foods before 1939, was to become a major outlet. Direct distribution of surplus commodities as a percentage of total direct distribution rose from 1 percent in 1936 to 35.6 in 1942, and was to become a larger percentage in later years. The introduction of the food stamp program in 1939 was a factor in the decline in the quantity of food distributed directly to needy families. Direct distribution, except for school lunches, was discontinued in communities where the food stamp program was in operation.

Since neither hunger nor food surpluses were bounded by the

school year, free summer lunches were organized during 1940 in schools and in summer playgrounds and camps (210, p. 2).

Sponsors using surplus foods in school lunch programs had to agree that they would not substitute surplus allotments of food for purchases. The lunch program had to be operated on a nonprofit basis, with meals served free to needy children. If paying as well as nonpaying children were to be fed, an arrangement had to be made to avoid any distinction being made between paying and non-paying children.

The school milk program, initiated as a penny milk experiment in Chicago on June 4, 1940, was a companion measure to the school lunch program. It had had a precedent in a special milk program organized by local organizations in Buffalo, N.Y., during 1936 (5). The school milk program was merged with the school lunch program during World War II. From its initial 3-week trial period in 15 elementary schools in areas in Chicago having the largest relief loads, the program was extended to New York City on October 14, 1940. By December 1941, it had been expanded to 8 areas which included 1,167 schools with 417,000 children participating. City welfare agencies could buy milk at a special low price for distribution to children in low-income areas either free or at a charge of a penny for a half pint. Producers received a price below the price they regularly secured for fluid milk, but above the price for milk sold for manufacturing purposes. Dealers submitted competitive bids to the Government for the business of processing and delivering milk to each of the schools. The Government paid indemnities to the handlers to make up the difference between the money received from the penny price paid by the children or welfare agencies for the milk and the amount charged by the dealers.

Use of Section 32 funds to pay indemnities had been authorized by the Agricultural Appropriation Act for the fiscal year of 1940, approved June 30, 1939.²³

Availability of funds to pay indemnities to milk handlers made it possible for a number of cities to initiate low-cost milk programs. A program to bring prices within the reach of low-income consumers had been initiated by New York City during 1934. Under a cooperative arrangement with milk distributors, milk was sold from 6:30 to 8:30 a.m. at special stations in the city for 8 cents a quart to people who could not afford to pay the regular retail price for the quantity of milk needed. The city provided the facilities and certified eligibility of families. The sales were made by the distributors. The authorization for payment of indemnities simplified the operation of low-cost milk programs, since Federal payments could be made directly to the handler who offered the lowest bid. Under this arrangement, a low-cost milk program began operating in the Boston area on August 7, 1939. Milk was sold for 5 cents a quart to families receiving relief and for 7 cents

a quart to families with Work Projects Administration wage earners. By April 1941, low-cost milk programs were in operation in Chicago, New Orleans, Washington, D.C., New York City, and St. Louis.

Surplus removal programs with the double purpose of raising farm incomes and providing better nutrition for families unable to buy adequate food at market prices received major emphasis, but other types of surplus removal programs were continued. Diversion programs had the objective of raising farm income by developing new outlets and uses for surplus commodities. Diversion programs were of three general types: (1) Those diverting commodities into byproducts or uses into which the particular product or quality of the product did not usually go, (2) those diverting commodities into special areas where such products were not usually sold, and (3) those diverting substandard grades to prevent their use in cheapening the pack of standard grades. The first diversion program had used processing tax funds in 1934 to divert peanuts to livestock feed and to the production of oil. During 1936, a diversion program for cotton provided for its distribution to State highway departments for use in roadbuilding. During 1936, indemnity payments were made to encourage shipments of winter pears to markets in the central and southern parts of the United States where winter pears were not usually marketed. A diversion program for figs was approved on August 14, 1936, providing indemnity payments to divert substandard figs into livestock feed.

Export Programs

Programs to increase domestic consumption and to divert surplus commodities into new channels or uses were paralleled by programs to assist in the exportation of excess agricultural commodities. Such assistance was the basic idea of the major farm relief proposals of the 1920's. Authority to subsidize exports was contained in a clause of the Agricultural Adjustment Act of 1933 authorizing the use of funds from processing taxes for the expansion of markets and the removal of agricultural surpluses. The 1933-34 program subsidizing the export of wheat from the Pacific Northwest was carried out under this authority.

The enactment of Section 32 in 1935 provided specific authority and a continuing source of funds. Encouragement of exports was the first of the uses listed in Section 32 for custom receipt funds and it was the use that received major emphasis in congressional discussion before adoption of the amendment. The report of the House Committee on Agriculture on the 1935 amendments had stated that an objective of these amendments was to insure that

adjustment of production did not operate to deprive American farmers of their share of foreign trade in agricultural commodities. Since the farm population was roughly 30 percent of the total population, farmers were entitled to 30 percent of the custom receipts (278). The amendment was referred to as one embodying the principle of export debenture. As originally passed, the use of funds to subsidize the exportation of raw cotton was prohibited, but this limitation was removed by an amendment to this provision carried in the Agricultural Adjustment Act of 1938.

Until August 1938, export programs were confined to minor agricultural commodities or limited to programs for a particular geographic area. Export payments or indemnities had been in effect for flour in the Pacific Northwest area during 1936, and they had been used for some types of nuts and fruits. Some of the programs were incidental to diversion programs.

During 1938, Secretary Wallace and other Department officials became concerned over possible permanent loss of the United States traditional share of a shrinking world wheat market. A series of droughts had resulted in virtual withdrawal from the world wheat market during the period 1933 through 1936. Other exporting countries were expanding production and using government measures to stimulate exports. Expansion of production in importing countries was shrinking the world market.

With the recurrence of normal weather in the United States in 1937 and the lack of a production control program, wheat supplies had piled up. World wheat supplies were at a record level. Under these circumstances, Secretary Wallace felt it was necessary to take aggressive action to regain the traditional share of the world market for wheat produced in the United States. Department officials felt that action to reclaim a share of the world market might influence other exporting countries to cooperate in a program to stabilize the world wheat market.

A subsidy program was inaugurated during August 1938. The goal for United States exports was set at 100 million bushels, to represent a proportion of the world market roughly equivalent to that which had been enjoyed during the 1920's. It was felt that a larger program would have an adverse effect on world prices and stimulate further tariff restrictions on the part of importing countries. Secretary Wallace made it clear that while the United States intended to fight to retain its traditional share of exports in the world market, the export subsidy method or other versions of two-price plans did not offer a solution to the wheat surplus problem.

By June 30, 1939, approximately 70 million bushels of wheat had been sold for export at a cost to the Government of about 30 cents per bushel. An export subsidy program for wheat continued to be offered during the 1940 and 1941 fiscal years, but it was on a limited basis because of the war in Europe.

An export subsidy program for cotton and cotton goods was

inaugurated during July 1939 (312, no. 978-40). Prices for American cotton were above world prices due to Government loans. The subsidy as initially offered was at the rate of 11½ cents a pound. More than 6 million bales were exported under this program during the 1940 fiscal year. With this stimulation for sales abroad, the quantity of cotton exported nearly doubled as compared with the previous year (298, 1941, p. 399; 356, p. 15).

An export subsidy program for corn was also initiated during the 1940 fiscal year. Around 25 million bushels of corn were sold to England under this program.

Cotton was also disposed of under a June 23, 1939, barter agreement with England. Six hundred thousand bales of cotton were exchanged for 85,000 tons of rubber. The rubber, stockpiled for emergency use, was to prove invaluable during World War II when a critical rubber shortage developed. The stockpiling of rubber fitted in with Secretary Wallace's ever-normal granary idea of stockpiles of food for lean years (300, p. 92).

Soil Conservation Service

A national policy of saving the soil as a basic resource had been adopted by Congress and an agency had been established with the single purpose of achieving this objective before Congress linked conservation of the soil with the restoration of farm purchasing power as objectives of the program administered by the Agricultural Adjustment Administration. In fact, the Soil Conservation and Domestic Allotment Act had been added as an amendment to the April 27, 1935, legislation which had directed the Secretary of Agriculture to establish an agency to be known as the Soil Conservation Service.²⁴ Secretary's Memorandum 673 of that day established the Soil Conservation Service as the successor agency of the Soil Erosion Service, which had been transferred to the Department of Agriculture from the Department of the Interior.

Discovering and demonstrating methods for combating soil erosion had long been a subject of study and experimentation in the Department of Agriculture. The 1935 legislation authorized for the first time an opportunity to develop and carry out on a permanent basis a coordinated program using all known methods and practices adapted to the needs of the land in relation to the kinds of soil, the different slopes, the degrees of erosion, and other factors. This type of approach was in sharp contrast to the approach of the Agricultural Adjustment Administration with its payments for individual measures and practices.

The coordinated approach had been developed by Hugh Hammond Bennett, the first Chief of the Soil Conservation Service. He had applied this approach in demonstration projects organized

on a watershed basis as organizer and head of the Soil Erosion Service of the Department of the Interior. The groundwork had been laid for such an approach by soil erosion research work carried out jointly by the Department of Agriculture and State experiment stations, beginning in 1929, on 10 soil erosion experimental farms. This work had been under Bennett's general direction. Bennett had officially launched a crusade against the menace of soil erosion with the publication of his bulletin on the subject during April 1928.

Soil Conservation Service Preceded by Crusade Against Soil Erosion

Hugh Bennett saw soil erosion as a crime against nature and posterity. He issued repeated warnings that nations had disappeared from the face of the earth as a result of soil erosion. He estimated, in 1935, that approximately 125 million acres of land had lost all or the greater part of their irreplaceable topsoil and that erosion was getting actively underway on another 100 million acres (291, p. 7). The situation called for more than research. It called for action on a national scale.

Authorization for soil erosion control work as a means of unemployment relief by the National Industrial Recovery Act of June 16, 1933, offered an opportunity for action. The Civilian Conservation Corps was utilizing unemployed youth to carry out reforestation and other conservation projects in the National Forests and the National Parks.

Erosion control on privately owned farmland presented a greater problem than erosion control on public lands. To most Department officials, this was only one of many pressing problems. To Hugh H. Bennett, saving the land was the problem of utmost importance.

He was determined that no simple mechanical solution such as terracing should be adopted to solve the complex problem. The program must provide an overall integrated attack against erosion, using all known methods in the combinations needed for each individual parcel of land.²⁵

Bennett enlisted the support of a specialist in the Bureau of Plant Industry, A. J. Pieters, to recommend a coordinated national program of erosion control which would use the combination of vegetative, engineering, and other methods needed in a nationwide research and demonstration program. Before their recommendations were formally sent to Secretary Wallace, arrangements had been made to carry out a soil conservation program on both public and private lands. This program, utilizing relief labor, was to be financed by a \$5 million allotment of Public Works Administration funds.²⁶ The work was to be administered by the Bureau

of Agricultural Engineering under the direction of the Administrator of Public Works.

Wanting to insure that the soil conservation program would not be limited to terracing, Bennett discussed the problem and his own concept of the type of program needed with Assistant Secretary Tugwell, who served as the Department of Agriculture representative on the Special Board of Public Works. He found that Tugwell agreed on the need for a coordinated national program of erosion control.²⁷ As a result of their agreement, the Special Board for Public Works arranged for the allotment of \$5 million to be made to the Department of the Interior instead of the Bureau of Agricultural Engineering of the Department of Agriculture.²⁸ Bennett was invited by Secretary of the Interior Ickes to establish and administer a soil erosion program in the Department of the Interior (36, p. 84).

Secretary Wallace agreed to grant Bennett a leave of absence beginning September 19, 1933, and agreed to authorize the transfer of a number of specialists with him to carry on the erosion-control work of the Public Works Administration.²⁹

Assistant Secretary Tugwell believed the conservation project should be established as a temporary emergency project under the direction of Harold Ickes as Public Works Administrator. Secretary Ickes proceeded to establish the Soil Erosion Service as an agency of the Department of the Interior and to carry on a campaign to have several functions and agencies of the Department of Agriculture transferred to the Department of the Interior (198, ch. 20; 116, vol. 1, pp. 250, 258-259, 325-326, 343-344).

Soil Erosion Service Established in Interior

The Soil Erosion Service was established in the Department of the Interior, September 19, 1933.³⁰ With its multiple attack on soil conservation, the Soil Erosion Service built up a staff which included experts in technical fields drawn largely from the Department of Agriculture and the land-grant colleges. It worked out cooperative experimental research projects with State agricultural colleges and discussed formal agreements with State extension services. Director Bennett was critical of measures taken to control erosion which were not subject to his direction. He complained that representatives of the Federal Emergency Relief Administration "were instigating the Extension Service, through its county agricultural agents, to stir up a nationwide terracing program."³¹

The Department of Agriculture became concerned with what appeared to be an attempt to build up a duplicating organization within the Department of the Interior. It began to resist the transfer of additional specialists to the Soil Erosion Service, and questioned the advisability of continuing in the Department of the Interior an organization which was dealing with private land-

owners.³² The National Grange, the American Farm Bureau Federation, the Land-Grant College Association, the Society of American Foresters, and other organizations exerted their influence during 1934 and early 1935 to promote the transfer of the Soil Erosion Service to the Department of Agriculture (286, p. 105; 285, pp. 126-138).

Secretary Ickes, who was determined to build a graft-free reputation for the Department of the Interior, became concerned over the propriety and legality of furnishing direct Government assistance to private landowners. Beginning in the spring of 1934, he called for curtailment of spending for erosion control on private land, particularly for the building of fences.³³ Bennett did not share Ickes' concern over the propriety of carrying out soil erosion projects on private lands, for he felt it was on private lands that erosion provided the greatest threat to the national welfare. Work on private lands had proved to be popular and was favorably regarded by many Members of Congress.

To resolve the issue of the propriety and legality of spending public funds for demonstration work on private lands, Secretary Ickes appointed a committee consisting of Ward Shepard of the Indian Service, who served as chairman; W. W. Johnston of the Reclamation Service; and Prof. C. F. Shaw of the University of California. This Committee on Soil Erosion formally submitted its report to the Secretary of the Interior on December 18, 1934.

The committee reported that in its judgment erosion control on private lands was legal and justified in regions where erosion had gone beyond the control of individuals because of the large areas affected and the cost involved. The committee recommended a number of modifications in policy, stressing the need for landowners to take a more active part in the demonstration work and the need to give greater emphasis to the educational aspects of the demonstration work as against direct aid to farmers. It recommended that owners be required to organize and set up machinery for active cooperation before the Government established a demonstration project. The committee recommended that all soil erosion activities concerned with private land be transferred to the Department of Agriculture, provided the Department would consolidate all erosion control and research on erosion control on private lands. The committee also recommended that the Departments of the Interior and Agriculture make the necessary arrangements, including the outline of legislation, for establishment of a consolidated soil erosion service on a permanent basis (325).

The Soil Erosion Service was transferred to the Department of Agriculture by an order of Ickes as Administrator of Public Works, March 23, 1935, approved by the President on March 25, 1935. The decision was made by President Roosevelt while Ickes was vacationing in Florida and at a time when congressional hearings were underway on bills to reconstitute the Soil Erosion Serv-

ice as a permanent agency of the Department of the Interior (286; 116, vol. 1, pp. 325-326).

During the period when it was in the Department of the Interior, the Soil Erosion Service had established 40 erosion-control projects. Thirty-seven were demonstrational in character and involved private lands. Three complete land-rehabilitation projects were located, for the most part, on land owned by the Federal Government. The three projects covered an aggregate area of 35 million acres. The 37 demonstrational projects covered a total of 4 million acres and portions of 31 States. Approximately 50 Civilian Conservation Corps camps had been assigned to erosion-control work under supervision of the Soil Erosion Service (354, p. 3).

Transfer to Department of Agriculture

The order transferring the Soil Erosion Service to the Department of Agriculture included funds, personnel, property, and equipment. Secretary's Memorandum 665, issued March 27, 1935, announced that the Soil Erosion Service would operate as a separate unit of the Department of Agriculture under the direction of the Secretary. In addition to the soil erosion activities which had been conducted under the Interior Department, the Soil Erosion Service was to be responsible, beginning April 1, 1935, for the soil erosion investigations and regional experiment station functions which had been conducted jointly by the Bureau of Chemistry and Soils and the Bureau of Agricultural Engineering, and for the erosion-control nurseries and activities which had been under the direction of the Bureau of Plant Industry.

Reestablished as Soil Conservation Service

Following the change in status from an emergency to a permanent organization, the Soil Conservation Service was assigned responsibility for the Emergency Conservation Work Camps for erosion-control work on private lands which had been under the direction of the Forest Service. This transfer brought 154 additional work camps under the direction of the Soil Conservation Service (337, 1935, p. 7).

Consolidation of specialized erosion-control investigations and activities of several bureaus of the Department into the new Soil Conservation Service enabled the Department to carry on a concentrated attack on the physical phases of soil erosion. The dust-storms of 1934 had spread alarming evidence of soil depletion from the Great Plains to the Atlantic Ocean. But the concentrated attack on the physical aspects of soil erosion had to be related to other programs of the Department concerned with land policy, scientific research, education, farm income, and farm life. Secre-

tary Wallace designated Milton Eisenhower, Director of Information, to advise with H. H. Bennett on the problem of relating the organization and work of the Soil Conservation Service to that of other Department agencies (283, 1937, p. 28). He also appointed an interbureau committee to study the way in which all branches of the Department could contribute most effectively to the greatly enlarged program of soil conservation. The committee consisted of the Director of Information, the Chief of the Forest Service, the Chief of Public Roads, and the Assistant Chief of the Bureau of Plant Industry.³⁴ After studying the problems for a period of approximately 6 weeks, the committee prepared a detailed policy statement which was formally approved by Secretary Wallace on June 6, 1935.³⁵

The committee recommended that the work of the new Service be coordinated with that of other agencies to prevent duplication of effort and to make the most effective contribution to soil conservation. While recognizing that control of soil erosion was the major responsibility of the Soil Conservation Service, the committee laid stress on building an effective, permanent, and economically feasible program, and indicated that the cooperation of many agencies in the Department would be required to effect the ends sought. The committee recommended the formation of legally constituted local soil conservation districts or associations empowered to carry out an erosion control program on lands owned or controlled by members of the associations, and that the Service carry on its projects on privately owned land through these organizations by July 1, 1937. It suggested limitations on contributions of farm materials and prohibition of cash contributions to private land owners. Requirement of a cooperative agreement for a minimum period of 5 years as a condition for providing assistance to private land owners was suggested. The committee recommended formation of State soil conservation advisory committees which would include as members the State directors of extension and the State directors of experiment stations to aid in planning, extension, and technical phases of the conservation program.

In his endorsement of the report on June 6, 1935, Secretary Wallace stressed the need to encourage the formation of legally constituted soil conservation associations which would accept a high degree of local responsibility for erosion-control work. The need to insure local cooperation had been stressed in the report of the Committee on Soil Erosion, made in 1934, to Secretary Ickes. The Secretary of Agriculture had been given authority to require local cooperation and State and local legislation as a condition for assistance by Public Law 46 of April 27, 1935.

The Chief of the Soil Conservation Service slowly began to shift from a program of research and demonstration on a watershed basis to one of assistance to farmers organized into legally constituted soil conservation associations. The demonstration projects had been spectacularly successful and the number of

projects had quickly multiplied. In less than a year after the Soil Erosion Service had been transferred to the Department of Agriculture, the number of demonstration projects had increased from approximately 41 to 141, and approximately 140,000 people had been assigned to work on these projects (283, 1937, pp. 836, 851). Bennett, testifying before a Senate committee on May 6, 1937, stated that the number of demonstration projects would be considered sufficient if one were available so that farmers in a radius of about 50 miles could come to see a project (298, 1938, p. 631). Congressman Malcolm Tarver of Georgia, a member of the House of Representatives Committee on Appropriation's Subcommittee on Agriculture, stated on February 22, 1939, that he would like a sufficient number of demonstration projects created to enable every farmer in the country who had a problem of eroded lands to examine the demonstration (283, 1940, p. 1004).

Soil Conservation Districts

The excessive, if not prohibitive, cost of providing demonstration projects within the reach of all farmers on an individual basis, the need for more active farmer participation to insure the continuance of soil erosion control measures and conservation practices initiated by or with the aid of Government workers, and the need to insure the participation of those farmers whose destructive practices affected the land and welfare of others were factors in the decision to shift from a demonstration program to one of working through organized groups of local farmers. Perhaps a more important factor was the conviction of Secretary Wallace, Assistant Secretary Wilson, and others that democracy could not succeed "unless the mass of the people participate in the affairs of government." In the long run, a soil conservation program could not succeed, it was believed, unless farmers were responsible for its planning and management. Land use regulations to prevent soil from washing and blowing away could not be imposed from Washington. They must be adopted by the local people working together to meet a common problem (393; 169, p. 7).

Drawing up a plan designed to secure farmer participation and the adaptation of soil conservation measures to meet local needs, while still insuring that soil erosion control measures were adequate to meet the needs of watershed areas and to warrant the expenditure of Federal funds to conserve the soil as a national heritage, presented difficult political and legal problems. A Texas law, approved May 21, 1935, which authorized the creation and incorporation of wind erosion districts was brought to the attention of Assistant Secretary Wilson by county judges from Texas who were interested in securing Federal assistance for the wind erosion control work in their counties.

The Texas statute provided for the creation of wind erosion districts upon the majority vote of qualified taxpaying voters of a county. The county judge and county commissioners were to serve as the governing body of such a district following its establishment and to have the right to treat any land to prevent the spread of soil erosion and damage to other land in the district (221, vol. 1, p. 771).

The Assistant Secretary saw the possibility of Federal cooperation with farmers organized into soil conservation districts. Farmers should draw up their own regulations and vote upon them before they became effective. Tenants as well as landowners should participate in making the decisions.³⁶

The idea of drafting a model law for consideration of the States was discussed inside the Department of Agriculture, with State officials, representatives of land-grant colleges, and with Congressmen. Experience and ideas were pooled. Philip M. Glick, Chief of the Land Policy Division of the Office of the Solicitor, was responsible for many of the ideas as well as for drafting the "Standard State Soil Conservation Districts Law." On February 27, 1937, President Roosevelt sent copies of the "Standard Law" to State Governors with the recommendation that States adopt legislation along the lines of the standard act.

The standard act provided for the organization of soil conservation districts as governmental subdivisions of the State upon the favorable vote of a majority of the "land occupiers" in the proposed district. Each district was to be governed by a group of five supervisors. Three of the supervisors were to be elected. Two were to be appointed by a State soil conservation committee upon which the State director of extension, the director of the State experiment station, and the State conservation commissioner or commissioner of agriculture were to serve as *ex officio* members. Additional members might include an appointee of the Secretary of the United States Department of Agriculture. The districts were to have the authority to engage in cooperative action to combat soil erosion and to prevent local misuse of land by prescribing land use regulations. These regulations had to be approved by majority vote of land occupiers in a local referendum before they could become effective (88; 352, p. 19; 89).

Twenty-two States responded to President Roosevelt's recommendation for enactment of State enabling laws during 1937. Nineteen additional States had enacted legislation by the end of 1941, bringing the total number to 41. While patterned after the recommended standard act, the State laws provided some variations from the model. Only 10 States permitted nonowner operators to vote in the referendum. All but 10 States required more than a simple majority of votes cast for the adoption of a regulation. In most cases, requirements of State legislation made adoption of land use ordinances difficult. As a result, the land use regulating power was seldom used (169, pp. 150-151).

While most States did not authorize or use all the authority which the Soil Conservation Service considered desirable, establishment of districts provided an organization through which local farmers and the Federal Government could join forces in an all-out nationwide campaign to conserve the soil. The Federal Government provided technical assistance in drawing up and carrying out farm-conservation plans. The type of conservation plans developed, based on suitability of land for different uses, included stripcropping, terracing, drainage, crop rotation, contour cultivation, fertilization, pasture improvement, controlled grazing, woodland and wildlife plantings.

Erosion-control devices for difficult situations numbered more than 200 (353, p. 15). Secretary Wallace, writing in 1940, stressed the importance of stripcropping and contour cultivation as a design for farming:

The basic idea is to get away from square farming in a round country. Terraces may help; in places they are necessary; but the main thing is to re-form fields and rotations into strip-patterns cut to the curve of the land, much as the parts of a garment are cut to the configuration of a human body. Land farmed along these lines is fairly sure to stay there; and it is beautiful. . . . A strict gridiron pattern defies common sense and the laws of gravity (368, pp. 71-72).

Shift in emphasis of the work of the Soil Conservation Service did not require abandonment of demonstration projects. Some of these were incorporated into soil conservation districts. During the fiscal year 1942, 26 demonstration projects were on an operating basis and 47 were on a maintenance basis (283, 1943, pt. 1, p. 935).

In addition to the detailed conservation surveys carried out on individual farms as a basis for the preparation of the farm plans and the surveys basic to the special demonstration projects, the Soil Conservation Service carried out conservation surveys on a nationwide basis. On the basis of these surveys, the land was divided into eight land capability classes. These were based on type of soil, slope, degree of erosion, and special practices or measures needed to conserve the soil (283, 1940, p. 1034; 353, pp. 27-28).

Specialized detailed surveys relating to waterflow retardation measures on upstream farm and range land were undertaken by the Soil Conservation Service in cooperation with other agencies of the Department following enactment of the Omnibus Flood-Control Act of June 22, 1936.³⁷ This act was the first legislation which recognized the role of land in flood alleviation work. This work was supplementary to the large engineering installations for flood control downstream which were under the jurisdiction of the War Department.

Until January 12, 1942, the Soil Conservation Service had the technical operating responsibility for a program of installing small water facilities in cooperation with the Farm Security Adminis-

tration and the Bureau of Agricultural Economics. This program was initiated in 1938 under authority of the Water Facilities Act, approved on August 28, 1937.³⁸ Water facilities were installed in low-rainfall areas of 17 Western States. They varied in size from small wells and ponds to relatively large facilities for group utilization. Work had been completed on 1,612 farms and ranches by June 30, 1940 (*353, pp. 5, 40*).

Additional responsibility was assigned to the Soil Conservation Service, effective on November 1, 1938 (*306, no. 790*). It was responsible for all erosion-control, flood-control, and related activities involving physical work on individual farms, watersheds, and other areas.³⁹ The functions transferred included (1) the land-utilization program authorized by Title III of the Bankhead-Jones Farm Tenant Act, formerly assigned to the Bureau of Agricultural Economics; (2) drainage and irrigation investigations formerly conducted by the Bureau of Agricultural Engineering; and (3) the action phase of the cooperative farm forestry program authorized by the Norris-Doxey Act of 1937.⁴⁰

The land-utilization program included the retirement and development of submarginal land. The bulk of the land acquired had been purchased before this program was transferred to the Soil Conservation Service. By 1940, the Soil Conservation Service was responsible for the management of more than 6 million acres of land belonging to the Federal Government (*353, pp. 42-43*).

Responsibility for soil and water conservation on public lands under the jurisdiction of the Department of the Interior was transferred from the Soil Conservation Service to the Department of the Interior effective June 30, 1940, under provisions of Presidential Reorganization Plan IV.

Other minor additions or subtractions were to be made in the responsibilities assigned to the Soil Conservation Service, but its basic function was to remain unchanged, despite recommendations for its consolidation with other agencies in the Department or for the decentralization of its operations to the State land-grant colleges. It provided for the first time a coordinated attack and a composite solution to the problem of soil erosion, but of equal importance was its ability to dramatize the manmade Dust Bowl, giving to the Nation a sense of urgency and of guilt.

The Soil Conservation Service's call to action to save the soil as a national heritage was the most easily understood and widely accepted objective of the agricultural programs inaugurated during the 1930's. Since it stopped with man's relationship to the land and did not become involved with the disturbing problems of prices, landownership, and rural poverty, it could be universally accepted without controversy as a patriotic objective. While "bankrupt land" contributed to the problems of "bankrupt people," soil conservation alone could not solve their problems.

The soil conservation approach needed to be combined and coordinated with the adjustment and agricultural conservation pay-

ment, the ever-normal granary loan, the crop insurance and the food consumption approaches to the farm problem. Other approaches to the farm problem were needed, for it was, in reality, a series of complex problems. The problems of the land were inextricably interwoven with the problems of the people on the land and of those in the towns and cities.

¹ Henry A. Wallace, Radio address on Jan. 21, 1936.

² Memorandum, Howard R. Tolley to Chester C. Davis, Aug. 17, 1934, in Production Control Files of Agricultural Adjustment Administration in National Archives.

³ 49 Stat. 163.

⁴ 49 Stat. 1148.

⁵ Personnel records of U.S. Department of Agriculture, Federal Records Center, St. Louis.

⁶ U.S. Agricultural Adjustment Administration, Secretary Wallace's Statement, Mar. 5, 1936, National Archives.

⁷ 50 Stat. 246; 50 Stat. 903.

⁸ 50 Stat. 754.

⁹ 50 Stat. 755.

¹⁰ 50 Stat. 754.

¹¹ 52 Stat. 819.

¹² 53 Stat. 1261.

¹³ 55 Stat. 88.

¹⁴ Wheat Crop Insurance Consulting Committee, Report, June 30, 1942, pp. 41-42 (Unpublished copy in USDA Library).

¹⁵ 3 F.R. 441.

¹⁶ Interview with William H. Rowe, Jan. 15, 1962.

¹⁷ Wheat Crop Insurance Consulting Committee, Report, June 30, 1942, pp. 185, 190.

¹⁸ 53 Stat. 550.

¹⁹ Authorized by a June 21, 1941, amendment to the Federal Crop Insurance Act.

²⁰ 57 Stat. 392.

²¹ 49 Stat. 1109; 50 Stat. 323; 52 Stat. 31.

²² Unpublished study, U.S. Production and Marketing Administration, Food Distribution Programs Branch, School Feeding in the United States, 1947.

²³ 53 Stat. 939.

²⁴ 49 Stat. 163.

²⁵ Memorandum, H. H. Bennett to H. G. Knight, June 16, 1933.

²⁶ Memorandum, Henry G. Knight, Chief of the Bureau of Chemistry and Soils, to the Secretary of Agriculture, July 25, 1933; Memorandum, Rexford G. Tugwell, Acting Secretary of Agriculture, to Harold L. Ickes, Administrator of Federal Emergency Administration of Public Works, June 9, 1933; Memorandum, S. H. McCrory, Chief of the Bureau of Agricultural Engineering, to John P. Wenchell, Office of the Solicitor of the Department of Agriculture, July 10, 1933; Minutes of the Special Board for Public Works, July 17, 1933.

²⁷ Memorandum, H. H. Bennett to Ebert K. Burlew, Administrative Assistant, Department of the Interior, Nov. 12, 1934.

²⁸ Special Board for Public Works, Minutes, Aug. 29, 1933.

²⁹ Letter, Secretary Wallace to Ickes, Sept. 12, 1933, and reply, Ickes to Wallace, Sept. 14, 1933.

³⁰ Personnel records of the U.S. Department of Agriculture.

³¹ Memorandum, H. H. Bennett to Ebert K. Burlew, Administrative Assistant, Department of the Interior, Nov. 12, 1934.

³² Letters, Henry A. Wallace to Harold L. Ickes, Dec. 10, 1934, and Jan. 8, 1935, and letter, Harold L. Ickes to Henry A. Wallace, Jan. 5, 1935.

³³ Memorandums, Harold L. Ickes to H. H. Bennett, Apr. 21, 1934, May 15, 1934, and Oct. 23, 1934; Memorandum, E. K. Burlew to H. H. Bennett, Oct. 19, 1934.

³⁴ Reports to Henry A. Wallace from Chief of Public Roads, Director of Information, Chief of Forest Service, and Assistant Chief of Bureau of Plant Industry, June 5, 1935.

³⁵ Memorandum, Henry A. Wallace to H. H. Bennett, June 6, 1935.

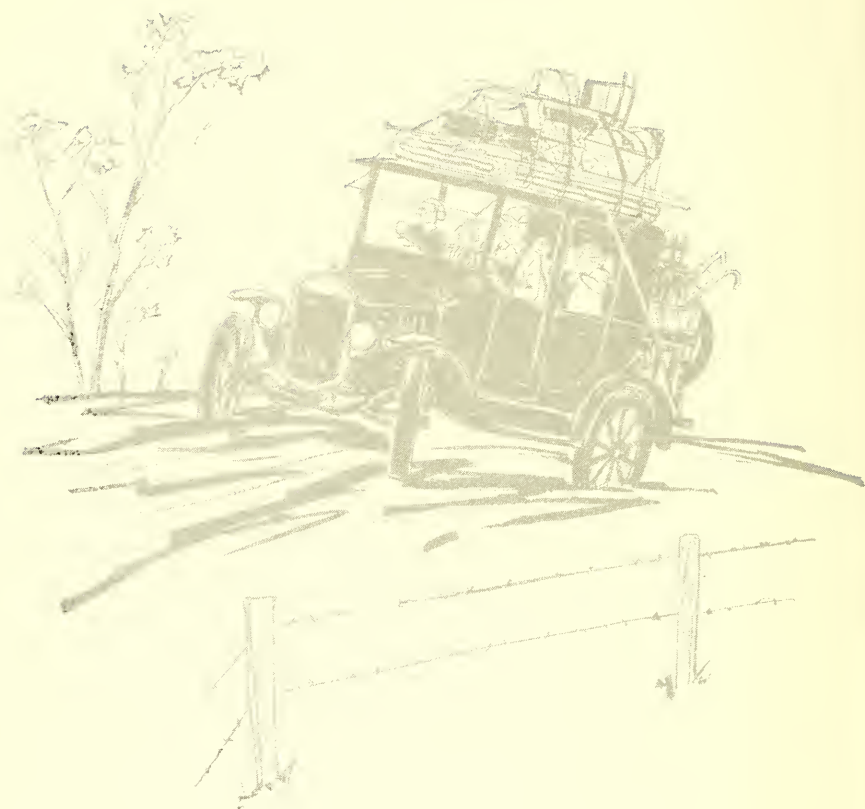
³⁶ Interviews with M. L. Wilson and Philip M. Glick, July 1961.

³⁷ 49 Stat. 1570.

³⁸ 50 Stat. 869; Water Facilities Board General Memorandum 2; Simons, Howard J., An Administrative History of the Water Facilities Program of the U.S. Department of Agriculture to July 1, 1942, typed manuscript, 225 pp.

³⁹ Secretary's Memorandum to Chiefs of Bureaus, Oct. 6, 1938.

⁴⁰ 50 Stat. 522; 50 Stat. 188.



New Rural Welfare

And

Credit Programs

The Resettlement Administration, responsible for helping destitute farm families and for retiring submarginal land, became a part of the Department of Agriculture on January 1, 1937.¹ Although an independent agency from its establishment on April 30, 1935, it had been headed by the Under Secretary of Agriculture, Rexford G. Tugwell.²

The Administration had been established by Executive order under authority of the Emergency Relief Appropriation Act of April 8, 1935. Short-term relief of impoverished farm people was its immediate objective, but its longtime purpose was to rebuild "that which was unwisely destroyed for decades—our land and the life it produced" (348, p. 5).

The longtime objectives of the Resettlement Administration appealed to President Roosevelt's strong humanitarian and conservation interests. He expressed his special concern for these objectives in informal remarks to Regional Resettlement Directors on June 20, 1935:

The work you are doing lies particularly close to my heart. . . .

The Resettlement Administration has begun a work in which we all believe. You who are here today are entrusted with the duty of bringing not only new hope, but a new program into the lives of a great many thousands of families. Their economic position has been weakened by years of depression and by attempts on their part, either to make a living on land that was unsuitable to begin with, or on land that has been so reduced in fertility through erosion or through improper cropping that it is impossible for them to make a living on it.

One thing that fascinates me about your work is that no two cases are the same. . . .

The first benefit expected from this work will be taking and keeping these families off the relief rolls. The money we are using comes within the objective set by the Congress which is to put three and a half million people to work at a cost of four billion dollars.

Another objective we seek is to devote our land resources to their highest uses, not only for this generation but for future generations (187, vol. 4, pp. 277-279).

Despite President Roosevelt's strong support and the backing of others who understood and sympathized with its longtime objectives, the Resettlement Administration was soon under sharp attack by critics who labeled its programs as extravagant and impractical (271, *Aug. 22, 1935, Feb. 2, 3, 1937*). Much of the President's press conference of May 15, 1936, was given to a defense of the Resettlement Administration in response to a reporter's question concerning reports that the agency would be discontinued (187, *vol. 5, pp. 186-188*). President Roosevelt assured reporters that the agency's rehabilitation program was "extraordinarily effective." He stated:

Just offhand, I think that between 100,000 and 200,000 families have been educated in the past two years to run their own show and are now capable of doing it without any further Government aid. That is quite a lot of human beings.

Attacks on some phases of the Resettlement Administration's program continued. As Administrator, Rexford G. Tugwell became the target for much of the criticism and the center for much of the controversy.

Under Secretary Tugwell decided to resign, hoping that his departure would make it possible for the program to be continued in a less controversial atmosphere (231). Before his resignation was announced, he had proposed a special farm tenancy program, and the President had designated Secretary Wallace as Chairman of a Special Committee on Farm Tenancy (162, *Nov. 15, 18, 1936*). Tugwell urged the Secretary to bring the resettlement program into the Department and to take a tour of Southern States to study the conditions of sharecroppers and tenants and the contributions of the Resettlement Administration to these problems (136, *pp. 460-463; 162, Nov. 20, 22, 24, 1936*).

The trip taken during the latter part of November 1936, resolved any doubts Secretary Wallace may have had about the need for the Department of Agriculture "to stop the wastage of human as well as soil resources that grow out of farm tenancy." In an article about his trip, published in the January 3, 1937, issue of the *New York Times*, Secretary Wallace wrote:

Any one who travels from Arkansas to Georgia by automobile, as I did recently, cannot help realizing that the agricultural problem is far from solved. . . .

The cotton farmers of Southeastern United States were in a relatively prosperous situation, according to all accounts; and yet I have never seen among the peasantry of Europe poverty so abject as that which exists in this favorable cotton year in the great cotton States from Arkansas to the East Coast. . . .

It is not the fault of these people that their situation is what it is, nor it is the fault of the landlords and wealthy people of the South. The entire United States is to blame. . . . We shall determine whether or not it is within the power of government to stop the wastage of human as well as soil resources that grow out of farm tenancy. . . .

The decision to sponsor special programs on a continuing basis to rehabilitate low-income farmers was an important departure from the traditional policy of the Department of Agriculture. Research and education had served American farmers by developing new methods of farming and improving old ones, but little notice had been given to the fact that farmers "at the bottom of the heap" had been unable to take advantage of these programs because of their lack of education and equipment, poor land and small farms, high interest rates and excessive debts, and insecurity of tenure.

Low-income farmers came to public attention in 1933 when many lost their farms and means of livelihood as a result of the depression. Large numbers required public unemployment relief, but it was evident that the problems of many had begun long before the depression. Secretary Wallace underscored the seriousness of the longtime problem on January 23, 1937, when he said :

But even more significant than this group of depression victims, were those whose poverty represented the result of a generation or more of limited opportunity and social handicap. Their condition revealed the existence of long-time undermining forces in American agriculture, a corrosion of our rural life at its very roots (*312, no. 1060-37*).

Programs of the Resettlement Administration

The Resettlement Administration's programs had offered a number of approaches to solving the problems of poor people and poor land. The most popular of these was the rural rehabilitation program of supervised loans. This was the program which Secretary Wallace and Acting Budget Director Bell classified as the most important activity of the Resettlement Administration (*312, no. 1007-37; 284, p. 110*).

Rural Rehabilitation Loans and Grants

The supervised loan program grew out of the need to adapt relief grants and work relief to the special needs of farm people. By the end of 1933, large numbers of farm families were on the relief rolls. Many more became destitute during the severe drought of 1934. Federal Emergency Relief Administrator Hopkins initiated a rural rehabilitation program on April 1, 1934, to replace civil works and direct relief programs for all people on farms and in towns of less than 5,000 people (*257, p. 29*). The objective of the rehabilitation program was to make it possible

for needy people in rural areas to reestablish themselves on a self-supporting basis. This type of program was less costly than direct relief and provided a means of helping families to become self supporting.

The Federal Emergency Relief Administration had taken some steps to provide technical supervision. The Resettlement Administration developed the supervised credit plan called a standard rehabilitation loan (257, p. 131). Each standard loan was based on a farm and home management plan worked out by the farm and home management supervisors in cooperation with the borrowing family to fit the needs of the family and to insure the use of good farming practices.

Short-term loans at an interest rate of 5 percent had been made to more than 300,000 low-income farm families by January 1937. Supplemental loans or loan extensions were required for some families. Loans were at times supplemented by grants to help families through hardships or disasters such as illness or crop failure. Grants were made to approximately 150,000 families during the year ending June 30, 1936. The grants made to destitute families, some of whom were recipients of rehabilitation loans, were around \$20 a month per family (284, pp. 236, 242).

A large number of grants were made to families in drought areas. Special feed and seed loans were also made to these families. Special loans and grants were made to enable low-income farmers to purchase cooperatively a purebred sire, tractor, combine, or other equipment which they could not afford to own individually. Cooperative associations, including purchasing and marketing associations, were also encouraged by loans and grants. These associations were considered a tool of rehabilitation (257, pp. 200, 209-213).

Recognizing that poor health and physical disability were important contributing factors to economic failure, the Resettlement Administration began helping needy farmers organize group medical care services. Cooperative group health associations had been organized on an experimental basis with the assistance of loans, grants, and expert advice. A Public Health Section, headed by a medical officer, had been established in the Resettlement Administration on January 2, 1936, to formulate and develop a broad program of public health care. The Chief Medical Officer was detailed from the staff of the United States Public Health Service. During the first year of experimental development, borrowers in eight counties were helped to organize medical care associations. Through these associations, borrowers could obtain medical care at a cost they could afford, prepaying annual fees into a pooled fund. Membership was voluntary and the members had free choice of physicians (257, pp. 233-235).

The farm debt adjustment program of the Resettlement Administration also provided important assistance for rehabilitation clients and other low-income farmers. Under this program, volun-

tary State and county committees brought creditors and debtors together to arrive at adjustments which would prevent foreclosures and destitution. This work had been initiated by the Farm Credit Administration during 1933, at the request of the President; it was transferred to the Resettlement Administration in September 1935 (348, pp. 12-13; 144, pp. 52-53; 257, p. 253).

The rehabilitation loans, grants, and supplementary services developed to give farmers a chance to remain on farms and become self-supporting did not meet the needs of the migrants who no longer had any stake in the land. Homeless, they followed the crops in search of work undermining their own health and threatening the health of communities which used their labor.

Migrant Labor Camps

The Department of Agriculture accepted some responsibility for the plight of the migrants as well as for that of the low-income tenants and sharecroppers when it absorbed the Resettlement Administration. Some migratory labor camps had been constructed and were being operated by the Administration. This program, like the rehabilitation loan program, had its origin in the operations of the Emergency Relief Administration. The California Emergency Relief Administration had constructed the first of the migratory camps as a part of its rehabilitation program (288, pt. 3, p. 1164). The migratory labor camps were a minor phase of the program of the Resettlement Administration and were given little attention in the Department or in Congress when the programs of the Resettlement Administration were transferred to the Department.

Resettlement Projects

The functions of retiring submarginal land and resettling destitute or low-income families from rural and urban areas had been considered the major responsibilities of the Resettlement Administration when it was established in 1935 (257, p. 34). Rehabilitation loans and supplementary programs were considered the emergency aspects of the Administration's work. By 1937, when the work was transferred to the Department, the major emphasis had shifted to rehabilitation programs. However, resettlement projects, the most controversial part of the Resettlement Administration's program, had been continued.

The resettlement projects were considered a necessary complement to the land utilization program which had been initiated by the Land Policy Section of the Agricultural Adjustment Administration, and the Federal Emergency Relief Administration during 1934 (187, vol. 4, p. 150). The land utilization program, trans-

ferred to the Resettlement Administration when it was established, had three major phases: Purchase and removal of submarginal land unsuitable to profitable farming; conversion of this land to uses which would be of benefit to the American people, such as the development of parks and forests; and the permanent rehabilitation and resettlement of the people who had been living on the land purchased as unsuitable for cultivation.

The primary objective of the resettlement projects was to enable the farmers displaced by the purchase of submarginal land and other farmers living on land which could not provide a decent standard of living to acquire homes and a means of livelihood. Another objective was

. . . to point the way for those industrial workers who were subject to sporadic or seasonal unemployment, to increase their income and raise their standard of living by engaging in part-time farming at the same time as they carried on their usual occupations (*187, vol. 2, pp. 290-291*).

A third objective of the resettlement projects was to demonstrate a new kind of community planning which would combine many of the advantages of country and city life. This community planning was designed to provide good housing at reasonable rents for moderate-income families and at the same time give jobs to unemployed workers.

By the time the Resettlement Administration became a part of the Department of Agriculture, the decision had been made to complete the projects already underway, but that the Government would not venture into new ones. Several unsuccessful attempts have been made to classify the projects, but no two were alike. They can only be understood in the light of their historical background and the desperate needs of displaced and impoverished people in the depth of a severe depression.

The first to be undertaken were the rural homestead projects. A Division of Subsistence Homesteads was organized in the Department of the Interior on August 23, 1933, with funds appropriated under the National Industrial Recovery Act (*254, pp. 40-41*). M. L. Wilson organized and served as the first head of this Division. Although the objective stated in the legislation was "aiding in the redistribution of the overbalance of population in industrial centers,"³ Wilson also envisaged rural homestead projects as a means of shifting poverty-stricken farm families from submarginal land. Eleanor Roosevelt was one of the most enthusiastic proponents of the rural homesteads. Her experience with a furniture factory at Hyde Park led to her interest in the possibilities of small handicraft production. Her visits to the coal-mining region of West Virginia had intensified her desire to help the destitute unemployed and underemployed. One man she visited showed her his weekly pay slips. He had less than a dollar in cash left for his family each week after deductions had been made for his bill at the company store, his rent, and oil

for his mine lamp. His six underfed children lived on scraps other Americans would feed to their dogs. One little boy clutched a pet white rabbit. His sister turned to Mrs. Roosevelt and said, "He thinks we are not going to eat it, but we are." The boy fled down the road clutching his rabbit. The conditions she and others saw convinced them that immediate action was imperative. Subsistence homesteads where people could grow their own food appealed to Mrs. Roosevelt and many other humanitarians as a possible solution (186, pp. 126-128).

The Division of Subsistence Homesteads of the Department of the Interior started construction or acquired land for 33 small part-time farming communities (332, p. 5). An additional 65 projects in the planning stage had been approved by the Secretary of the Interior. In an analysis of the subsistence homesteads projects published in 1942, Russell Lord and Paul H. Johnstone made the following statement:

There are many features of life on the subsistence-homesteads projects for which there is wide and active desire . . . and experience seems to indicate that they could be wisely and successfully repeated. But it must be observed that these features that have been most markedly and widely successful are those that, in essence, offer the opportunity for improved housing and living standards in terms of prevailing urban and suburban tastes, and of values which are moral and esthetic rather than economic. By this type of criteria, many features of the program may tentatively be judged a very considerable success.

But as a measure to cure the major economic ills that brought about the unemployment and insecurity out of which the program was generated, the subsistence-homesteads program must be considered inadequate, and to whatever extent it was embarked upon as *an alternative* to more basic action, it constitutes a flight from the heart of the problem. Good housing with earth to dig in, a chance to garden, elbow room, a wholesome and beautiful place in which to rear children—such things are good and widely desired. But they do not function as a substitute for an adequate cash income and security of employment (254, pp. 183-184).

Mrs. Roosevelt gave the following evaluation of the homestead projects in 1949:

It was all experimental work, but it was designed to get people off relief, to put them to work building their own homes and to give them enough land to start growing food.

It was hoped that business would help by starting on each of these projects an industry in which some of the people could find regular work. A few small industries were started but they were not often successful . . . only a few of the resettlement projects had any measure of success; nevertheless I have always felt that the good they did was incalculable. Conditions were so nearly the kind that breed revolution that the men and women needed to be made to feel their government's interest and concern (186, pp. 127-128).

Three suburban resettlement projects were underway when the Resettlement Administration was transferred to the Department, January 1, 1937. These "Greenbelt communities" were completed in the summer of 1938 and nearly all of their 2,258 homes were

occupied early in 1939. Greenbelt, Md., near Washington, D.C., was started first. The second one, Greenhills, was located 5 miles north of Cincinnati, Ohio. The third, Greendale, was near Milwaukee, Wis. These three suburban communities were built as demonstration projects with three objectives in mind: To determine a new kind of community planning, which would combine many of the advantages of both city and country life; to provide good housing at reasonable rents for moderate-income families; and to give jobs to thousands of unemployed workers (331).

Arthur Schlesinger, Jr., has made the following comment on the suburban and other resettlement projects:

... in backing Suburban Resettlement, Tugwell understood, perhaps prematurely, a tendency in American life which in another decade and a half would be compelling—the flow of population from the cities to the suburbs. The Greenbelt idea of the thirties found a kind of distorted realization in the suburban developments of the fifties. Ironically for the Resettlement planners, when success at last took place, even in their own projects, it only completed the defeat of the original conception of an autonomous community. Many of the Resettlement projects were bailed out by the war; in time, the government got back good returns on the original investment. But such communities, instead of laying the basis for a new type of civilization, only saw the reabsorption of their inhabitants into the main pattern of American life (198, pp. 372–373).

Some community or cooperative type of resettlement projects were also organized by the Resettlement Administration. Some had been initiated by the Federal Emergency Relief Administration. Community facilities were organized for these projects. Farm and home guidance was provided. In a few communities, farmsteads were grouped around a local center with the farmland located in surrounding community areas, worked as a unit. One of the objectives of these communities was to work out “ways and means for utilizing labor-saving devices and mass production methods in agricultural operation, without jeopardizing rural social standards” (348, p. 36).

Resettlement projects were interesting experiments. Some of the ideas have survived and helped lay the groundwork for building constructive cooperatives for farm and urban dwellers. When Resettlement was succeeded in 1937 by the Farm Security Administration, most of the resettlement projects were marked for liquidation.

Secretary Wallace, in a January 12, 1937, broadcast, referred to the community housing projects of the Resettlement Administration as “demonstration laboratories which in the long run may be profoundly significant and which in many cases may be profoundly disillusioning.” He emphasized that the community projects were a small part of the program and suggested that the Resettlement Administration should have been given a name like Farm Security Administration. The most important program of the Resettlement Administration, he stressed, was the supervised

rehabilitation loans. This type of loan might offer one of the best approaches to the farm tenancy problem, the Secretary suggested (312, no. 1007-37).

President's Committee on Farm Tenancy

As Chairman of the Special Committee on Farm Tenancy, Secretary Wallace recommended that the Resettlement Administration serve as a nucleus for an organization to be known as the Farm Security Administration (355, p. 11). The Administration was to be responsible for a tenant purchase program, with the Government buying land to be sold under long-term contracts at low interest rates to disadvantaged farm families; a rehabilitation loan program providing technical guidance; continuance on an experimental basis of the construction, operation, and maintenance of sanitary camps for migratory farm laborers; and for the continuation of a program to retire submarginal land. While the policy of promoting family-type farms was stressed, the committee indicated that cooperative groups might be aided to acquire lands by purchase or by a long lease. It was suggested that the leases be for a period of 20 years or longer "with a view to subleasing the property to farmers for corresponding periods." Such projects were to be initiated on an experimental basis. Small units for part-time farming might be provided.

Bankhead-Jones Farm Tenant Act

Legal authorization was provided by the Bankhead-Jones Farm Tenant Act of July 22, 1937, to carry out parts of the program recommended by the President's Committee.⁴ Title I of the act authorized appropriation of an amount not to exceed \$10 million for an experimental beginning of the tenant purchase program for the fiscal year ending June 30, 1938. An appropriation of \$25 million was authorized for the second fiscal year. The sum authorized for succeeding fiscal years was not to exceed \$50 million.

Section 43 of Title IV of the Bankhead-Jones Tenant Act authorized continuation of the resettlement project program only to the extent necessary for the completion and liquidation of the projects which were initiated or existed at the time of the approval of the act, July 22, 1937.

The loans for the purchase of land and for farm improvements were to be repayable over a 40-year period at 3 percent. Loans

could be made up to 100 percent evaluation of the farm. Variable payments, larger in good years and smaller in poor years, were authorized. The farms could not be sold or transferred without the Secretary's consent for a 5-year period. Funds were to be distributed equitably over the country on the basis of farm population and the prevalence of tenancy. Loans were to be approved by three-man county committees appointed by the Secretary of Agriculture. During the first 3 years, more than 13,000 loans were made to tenant families for the purchase of farms (*330, pp. 11-12; 332, p. 8*).

The tenant purchase program had its origin in a special farm tenant purchase project which had been initiated by the Resettlement Administration during December 1936. Under this program, the Government purchased farms for resale to tenants over a 40-year period at 3 percent interest. The farms were to be leased with the privilege of entering into a purchase contract when tenants could make a cash payment of 15 percent toward their purchase (*332*).

The Bankhead-Jones Farm Tenant Act directed the Secretary to develop a program of land conservation and utilization, including retirement of submarginal land. Carrying out a submarginal land retirement program had been one of the major functions of the Resettlement Administration.

Establishment of Farm Security Administration

On September 1, 1937, Secretary Wallace announced that administrative changes were being made to carry out the purposes of the Bankhead-Jones Farm Tenant Act. The name of the Resettlement Administration was changed to Farm Security Administration. The Administrator was to be responsible for the tenant purchase program, but responsibility for land conservation and land utilization was transferred to the Bureau of Agricultural Economics (*306, nos. 732, 733*). Will W. Alexander, who had served as Administrator of the Resettlement Administration after the departure of Tugwell, effective January 1, 1937, became the first Administrator of the Farm Security Administration.⁵

With the exception of land retirement, the new Farm Security Administration continued the programs of the Resettlement Administration, giving major emphasis to the rehabilitation loan program. During the fiscal year ending June 30, 1938, standard rehabilitation loans, totaling \$35,416,257, were approved for 61,883 new borrowers. Supplemental loans totaling \$29,651,759 were approved for 137,671 former borrowers (*330, p. 4*).

Tenant Purchase Program

The new tenant purchase program proved to be the most popular of those assigned to the Farm Security Administration. It could, however, reach only a small percentage of the farm tenants, sharecroppers, and laborers who wanted to qualify for farmownership loans. During the first year, loans were made to fewer than 2,000 of 38,000 applicants (330, pp. 12-13). Borrowers were carefully selected from applicants with the best prospects of success. Preference was given to farmers who were able to make a downpayment on the land, who owned the necessary livestock and equipment, and who had already demonstrated initiative and managerial ability. The Farm Security supervisor provided assistance in working out both a farm and home plan. Careful selection of borrowers, conservative prices paid for land, and variable payments under a 40-year amortization plan resulted in a program with negligible delinquencies. Many borrowers made substantial payments in advance.

President James G. Patton of the National Farmers Union made the following statement in support of the tenant purchase program :

When the program was inaugurated, modest appropriations were made for a test period. No agricultural program has received such universal acceptance and approval as has this one which bears the name of one of our great leaders, Senator Bankhead. Payments of maturities to date stand at 98.9 percent and borrowers are already becoming full owners of their farms out of agricultural income. The time has come when we should begin to make fuller use of this solution to the tenancy problem (298, 1944, p. 848).

Other organizations, Congressmen, and individuals came to the defense of the Farm Security Administration when proposals were made that it be discontinued as a separate agency. Rev. Edwin E. White of Pleasant Hill, Tenn., told the Senate Committee on Appropriations :

The Farm Security Administration, in my opinion, is not strictly a loan agency. It is the first agency that has come along to rehabilitate the poor rural families.

We have been talking about this group, disadvantaged classes in American agriculture for years, but here we have an agency that has really had a program to do something about it, and it seems today that it has actually proved that you can do it (298, 1944, p. 799).

Farm Credit Administration

The Farm Credit Administration became a part of the Department of Agriculture, effective July 1, 1939.⁶ It had been an independent agency since its establishment on May 27, 1933.

The Administration had been established, by Executive Order 6084 of March 27, 1933, to bring together the functions of all the units of the Federal Government engaged in administering loans to farmers and in supervising farm credit agencies making such loans. The need for emergency credit had become acute by this time. Need for a credit system adapted to the special needs of commercial agriculture had been recognized and action had been taken prior to 1933.

Background and Functions of the Farm Credit Administration

Congress took the first step toward solving the problem of assisting farmers to obtain adequate credit at reasonable cost with the passage of the Federal Farm Loan Act of 1916.⁷ This act resolved the question of whether the job could best be done through a co-operative system or through private capital by setting up dual systems. The Federal Farm Loan Act provided for the establishment of 12 Federal land banks and a system of joint stock land banks.

Congress provided the original capital for the Federal land banks with a provision for farmers to organize local associations. As farmers obtained long-term mortgage loans from the land banks, they were to invest 5 percent of their loans in the capital stock of their local associations. The local associations would in turn invest in the capital of the Federal land banks and gradually replace the Government-owned capital. They were to operate at cost. The joint stock land banks were to be capitalized by private interests, and operate to make a profit for their stockholders. Both systems were empowered to sell bonds to the investing public to raise money for making loans to farmers.

The Federal land banks, by making available amortized loans for periods as long as 20 to 40 years throughout the country, brought about fundamental changes in farm mortgage lending (27, pp. 126-134). They eliminated the need for high interest rates and renewal fees every 3 to 5 years. Other lenders gradually began to follow suit in order to compete.

In 1923, Congress authorized the organization of the 12 Federal intermediate credit banks to work alongside the Federal land banks.⁸ These banks by discounting farmers' short-term notes were to provide funds for operating purposes. The banks were wholesalers of credit. Congress hoped commercial banks would use their services and that farmers would also organize local associations to serve as retailers of credit. The banks were also authorized to lend to farmers' marketing cooperatives on security of commodities in storage. Federal intermediate credit banks had only limited use up to 1933 because of the lack of retail outlets. Congress had authorized the Secretary of Agriculture to lend

farmers the money to organize local agricultural credit corporations to use the facilities of the Federal intermediate credit banks. However, only a few were organized (27, p. 128).

Starting as early as 1918, the Secretary of Agriculture had been authorized and funds had been provided, from time to time, to make emergency seed, crop, and feed loans. These loans have been discussed in earlier chapters. The authority to make such loans was transferred to the jurisdiction and control of the Farm Credit Administration.

The Executive order also transferred the Federal Farm Board's legislative authorization for loans and its remaining assets to the Farm Credit Administration. The Farm Board's stabilization functions were abolished. The position of Chairman of the Federal Farm Board was transferred to the Farm Credit Administration, but in the transfer the name was changed to Governor. The Division of Cooperative Marketing of the Federal Farm Board was one of the organizational units transferred to the Farm Credit Administration, where its staff was assigned to a newly organized Cooperative Division. It was reinstated as a separate division of the Farm Credit Administration early in 1939 and renamed the Cooperative Research and Service Division (140, pp. 74-84).

The organization of the Federal Farm Board and its operations are discussed in chapter 7.

Establishment of the Farm Credit Administration by Executive order on May 27, 1933, was the first of a number of rapid actions taken by the President and Congress to solve the desperate credit crisis which faced American farmers. By 1933, farmers' income was approaching the vanishing point. The general depression had greatly curtailed the ability of the banks to sell bonds. Other sources of credit had dried up. Lenders were foreclosing mortgages by the thousands. Hundreds of thousands of other farmers were without credit and threatened with the loss of their farms. Additional legislation was needed to enable the new Farm Credit Administration to meet the desperate need for emergency credit.

Murray Benedict, writing in 1955, commented as follows on the inability of the land banks to meet the emergency situation without additional authority and funds:

The failure of the land banks to supply adequately the unexpected and unprecedented need for mortgage credit in the early 1930's was not due to poor administration of the banks themselves. It stemmed from the lack of suitable provision for supplementing the land bank system with an appropriate mechanism for assuring salability of its bonds in time of depression, and also from the absence of any provision for emergency credit which could be used in refinancing mortgages where there was reasonable prospect that the farmer could eventually work his way out (27, p. 147).

Congress made provision for emergency credit by passing the Emergency Farm Mortgage Act of May 12, 1933.⁹ This act provided a \$200 million fund to the Land Bank Commissioner to make both first and second mortgage loans to refinance farmers' debts

as a supplement to the Federal land banks. These loans were handled through the existing Federal land bank system. The Emergency Farm Mortgage Act also provided for a temporary reduction in interest rates on Federal land bank loans. The land banks were reimbursed from the United States Treasury for the difference between the interest rate the farmers contracted to pay and the emergency rate established by Congress. The legislation also provided for extension of time to worthy land bank borrowers who were unable to meet their payments, by authorizing the United States Treasury to subscribe amounts to the paid-in surplus of the banks equal to amounts deferred. The act also provided for the liquidation of the joint stock land banks.

The Emergency Farm Mortgage Act of May 12, 1933, was followed by the Farm Credit Act of June 16, 1933.¹⁰ The Farm Credit Act provided for the establishment of local production credit associations to bring the services of Federal intermediate credit banks to farmers. It provided the original capital to organize these credit cooperatives, but arranged for farmers to gradually replace the Government-owned capital by investing in stock in proportion to the size of their loans. The Farm Credit Act also used what was left of the revolving fund made available to the Federal Farm Board to capitalize 12 district banks and 1 central bank for cooperatives.

The Farm Credit Act of June 1933 was followed by the Federal Farm Mortgage Act of January 31, 1934.¹¹ This act used the Land Bank Commissioner fund to capitalize a Federal Farm Mortgage Corporation to expand the money available for emergency financing.

The additional authority and funds enabled the Federal land banks on their own behalf and for the Federal Farm Mortgage Corporation to stem the tide of foreclosures, save the farms of hundreds of thousands of families, and incidentally help unfreeze the assets of country banks and insurance companies.

From May 1933 to the end of 1935, the land bank system on its own behalf and for the Federal Farm Mortgage Corporation made 726,000 loans totaling nearly \$2 billion (*328, 1935, p. 119*). By the end of 1935, the Federal land bank system, together with the Federal Farm Mortgage Corporation, held 48 percent of the total farm mortgage debt of the country. The refinancing program cut farmers' interest bills by about \$38 million a year (*328, 1935, p. 8*). In addition, many creditors agreed to scale down farmers' debts to them so farmers might be eligible for mortgage loans and thus enable creditors to get cash. These scaledowns totaled an estimated \$200 million (*329, p. 31*).

With the refinancing program under control, the land bank system turned to the task of finding ways to straighten out the overlapping territories of national farm loan associations, later designated Federal land bank associations, and to strengthen their

financial structure. The stock of over one-third of the associations was impaired (*271, Apr. 23, 1940*).

By 1939, the land banks found many of the borrowers they and the Federal Farm Mortgage Corporation had financed were still not able to make enough progress to indicate they would be able to handle their debt load. The foreclosure rate on loans of the Federal Farm Mortgage Corporation rose.

It was at this time the Farm Credit Administration was transferred from its independent agency status to become a part of the United States Department of Agriculture.

Farm Credit Administration as a Part of the Department of Agriculture

Leaders of the Resettlement Administration had welcomed their agency's change in status in 1937. The Department of Agriculture offered the Resettlement Administration a haven from the political storm and assurance of a continuing future as a part of a permanent department of the Government. To leaders of the Farm Credit Administration, loss of independent status seemed a threat to the cooperative nature of the farm credit system. In the period between the President's message to Congress on Reorganization Plan No. I, April 25, 1939, and the actual transfer, effective July 1, 1939, protests were made to the President and to Congress (*271, Mar. 11, 1940*).

Dissatisfied officials of the Farm Credit Administration and others who opposed the transfer were assured by Secretary Wallace on May 22, 1939, that the Farm Credit Administration would not become an integral part of the Department of Agriculture. It would remain an autonomous agency except that it would report to the Secretary of Agriculture rather than to the President (*312, no. 1992-39*). The transfer of the Farm Credit Administration to the Department was one of a number of changes made by the President to regroup agencies according to their major purposes with the objectives of reducing the administrative burden of the President and of improving the administrative management of the Government (*271, Apr. 25, 1937; 312, no. 1992-39*).

Secretary Wallace's public statement of May 22, 1939, was followed on June 3, 1939, by a Secretary's memorandum which delegated to the Governor of the Farm Credit Administration all the power over farm credit conferred upon the Secretary by the President's Reorganization Plan No. I, except for the provision that the Governor should report to the Secretary of Agriculture and the further provision that the Secretary retained authority to modify or rescind the provisions of the memorandum at any time (*306, no. 823*). The statement and the memorandum were issued with the President's concurrence. Secretary Wallace's delegation of authority to the Governor of the Farm Credit Administration was

ruled as too sweeping a divestment of responsibility by the Comptroller General on September 26, 1939 ¹² (306, no. 846).

After reviewing Farm Credit Administration policies in relationship to other policies and programs of the Department of Agriculture, Secretary Wallace decided that the Farm Credit Administration as a part of the Department of Agriculture should have its functions coordinated with the other activities of the Department ¹³ (375). Forrest F. Hill was succeeded as Governor of the Farm Credit Administration by Albert G. Black, who had been serving as the Department's Director of Marketing and Regulatory Work. The appointment of Black as Acting Governor was announced by President Roosevelt on December 20, 1939.¹⁴ These changes were followed by an easing of the foreclosure policy of the banks and the Federal Farm Mortgage Corporation which resulted in cutting foreclosures from 18,694 in 1939 to 9,407 in 1940. Variable payment plans geared to farm income were tried on 7,000 farms, and standstill agreements on second mortgage Federal Farm Mortgage Corporation loans were put into effect on about the same number of farm loans. The effort to resell or lease foreclosed farms to former borrowers or their relatives was increased (328, 1940, p. 5).

Rural Electrification Administration

Transfer of the Resettlement Administration in 1937 and the Farm Credit Administration in 1939 brought into the Department of Agriculture programs which could help farm families secure or retain a place on the land. Transfer of the Rural Electrification Administration, effective July 1, 1939, brought into the Department a program which would help abolish farm drudgery and would hasten the agricultural revolution through the application of electric power to farm production.¹⁵ In an address welcoming employees of the Rural Electrification Administration into the Department, Secretary Wallace said:

. . . I feel that from the long-run point of view you are going to have an influence on farm life and on national life somewhat comparable to that which has been brought to pass by the automobile and the hard roads.¹⁶

The Rural Electrification Administration had made significant progress in bringing electricity to farm families in the period prior to its transfer to the Department. Before the establishment of the Rural Electrification Administration as an independent agency in 1935, only about 1 farm in 10 in the United States was receiving central station electric service. By 1939, one farm in five had electric service. A dairy farmer in Kentucky has described the feeling of his family when the lights were turned on.

We kept a lantern hanging beside the kitchen door. Winter mornings I'd take that lantern and head for the barn. It would be so dark out you'd think you were in a box with the lid shut. We always had at least a dozen cows to milk, and just my Dad and me to do it.

I had a lot of other chores to do before I went to school . . . that made me late to school some mornings. I'd fill the wood box beside the kitchen stove and I'd bring in a bucket of water. Sometimes the pump would be frozen solid and I'd have to thaw it out before I could pump the water.

Soon as I'd get home from school I had chores to do, and then an early supper, and after that I'd get at my homework. I'd study by a kerosene lamp in the kitchen, up close to the stove. We all spent most of our time in the kitchen during the winter.

We'd heard that the Government was going to lend us money to get lights, but we didn't believe it until we saw the men putting up the poles. Every day they came closer, and we realized it really was going to happen. So Dad went ahead and had the house wired.

It was almost two months later before they finished the job and turned on the power. I'll never forget that day—it was late on a November afternoon, just before dark. All we had was wires hanging down from the ceiling in every room, with bare bulbs on the end. Dad turned on the one in the kitchen first and he just stood there, holding onto the pull-chain. He said to me, Carl come here and hang onto this so I can turn on the light in the sitting room!

I knew he didn't have to do that and I told him to stop holding it, that it would stay on. He finally let go, and then looked kind of foolish (350, p. 23).

Part of the agency's popularity in Congress was due to memories of firsthand experience with the heavy work and the loneliness of farm life. Senator George W. Norris of Nebraska could recall "the innumerable scenes of the harvest and the unending, punishing tasks performed by hundreds of thousands of women . . . growing old prematurely; dying before their time" (199, p. 381). Representative William P. Lambertson of Kansas, a member of the House Appropriations Subcommittee on the Department of Agriculture, endorsed the program of the Rural Electrification Administration as "the best thing in the New Deal," and stated further that as a farmer he felt the money had been well spent. Representative Clarence Cannon, chairman of the subcommittee, stated that of all the new activities of Government, none was in higher favor with rural people in Missouri than the REA. He said:

It is bringing not only comfort and convenience and profit to the rural districts where it is most needed and where heretofore they have been most lacking, but it is bringing health, happiness, and general welfare to a degree unequaled by any recent development in our section of the country (283, 1941, pp. 1048, 1089, 1090).

With congressional popularity and specific congressional authority to carry on its program, the Rural Electrification Administration did not need, as had the Resettlement Administration, to seek a haven in the United States Department of Agriculture. It was transferred to the Department as a part of the President's Reorganization Plan No. II, which had as its objective consolidat-

ing independent agencies under major departments to reduce the administrative load of the President. The second Administrator of the Rural Electrification Administration, John M. Carmody, resigned when the Administration was transferred to the Department of Agriculture (199, p. 384). Carmody was appointed Administrator of the Federal Works Agency. He was succeeded by Harry Slattery, who was appointed September 7, 1939. Harry Slattery, who came to the Rural Electrification Administration from the position of Under Secretary of the Interior, testified on December 7, 1939, that he believed the Rural Electrification Administration belonged in the Department of Agriculture. He stated that while the program was dominantly that of rural electrification, it touched "the deeper, the real problem, that of a more prosperous rural America." He indicated that controversies would come up with respect to the particular department in which the Rural Electrification Administration should be located (283, 1941, pp. 1050, 1088). Secretary of the Interior Ickes had recommended, and continued to press President Roosevelt for, transfer of the Rural Electrification Administration to the Department of the Interior, arguing that it was a power agency and the fact that the power was for the use of rural people was incidental (116, vol. 2, pp. 632, 660-668, 683).

The Rural Electrification Administration was to remain in the Department of Agriculture, keeping its identity as an agency subject to the general direction and supervision of the Secretary of Agriculture and the Department's personnel and budget procedures.

The Rural Electrification Administration had been established as a relief agency by Executive Order 7037 of May 11, 1935, under authority of the Emergency Relief Appropriation Act of 1935, approved April 8, 1935.¹⁷ Morris L. Cooke, the first Administrator, after studying the problems involved, decided that an effective rural electrification program could not be carried out as an unemployment relief subsidy program (57, 172). The rural electrification program had to be established as an orderly lending program on an interest-bearing, self-liquidating basis. A major step in this direction was taken on August 7, 1935, with the issuance of Executive Order 7130, which freed the Rural Electrification Administration from many of the requirements which applied to expenditures of relief appropriations.

The Rural Electrification Administration first attempted to work with electric power companies, in the construction of rural electric lines, by making loans. After a special committee of the utility industry reported to the Rural Electrification Administration that "there are very few farms requiring electricity for major farm operations that are not now served," a dissatisfied Rural Electrification Administration and Congress decided that a new approach was needed. The result was passage on May 20, 1936, of the Rural Electrification Administration Act of 1936.¹⁸ This

act authorized the Rural Electrification Administration to make loans for rural electrification and to furnish electric energy "to persons, corporations, States, Territories and subdivisions and agencies thereof, municipalities, peoples utility districts and co-operative nonprofit, or limited-dividend associations organized under the laws of any State or Territory of the United States. . . ."

The act authorizing loans to nonprofit or limited dividend associations organized under State laws paved the way for the organization of rural electric cooperatives, but their organization presented complicated legal as well as technical problems. John M. Carmody, an industrial engineer, who succeeded Cooke as Administrator during February 1937, had his legal staff draw up a model law for States called the Electric Cooperative Corporation Act (350, p. 10).

Enactment of legislation by the States provided the necessary legal authorization, but prospective borrowers needed technical guidance in the organization and design of projects. Administrator Carmody added to the organization personnel competent to go into the field, in response to inquiries, to advise prospective borrowers how to organize and set up projects. He also decided to establish and maintain relations with the individual cooperatives rather than work through State or regional associations. Administrator Carmody applied scientific management techniques to the processing of loan applications.

By the time the Rural Electrification Administration became a part of the Department in 1939, it had gained the reputation of being one of the most efficiently and economically administered of Government agencies (116, vol. 2, pp. 659, 665, 668). The Rural Electrification engineers had worked out new designs and equipment which had cut the prevailing cost of rural lines from \$1,500 to \$2,000 per mile to around \$800 per mile (283, 1941, pp. 1051, 1052, 1065-1066, 1069, 1077-1081, 1084-1089).

Extension of rural electrification lines continued at a fast pace after the Rural Electrification Administration became a part of the Department of Agriculture. Advantages of electricity to the farm housewife and the opportunities which electrification offered in expanding operations, cutting costs, and saving labor could be discussed with farm people by field representatives of other Department agencies. By June 30, 1940, more than 30 percent of the farms in the United States were receiving central station electric service, and on September 12 of that year a loan was approved to serve the millionth rural consumer (350, p. 53). Extension of rural electrification to virtually all farm families in America had become a policy goal of the Department of Agriculture.

¹ Executive Order 7530, Dec. 31, 1936.

² Executive Order 7027, Apr. 30, 1935.

³ 48 Stat. 195.

⁴ 50 Stat. 522.

⁵ Personnel records, USDA, Federal Records Center, St. Louis, Mo.

⁶ 53 Stat. 1423.

⁷ 39 Stat. 360.

⁸ 42 Stat. 1454.

⁹ 48 Stat. 31.

¹⁰ 48 Stat. 257.

¹¹ 48 Stat. 344.

¹² Henry A. Wallace, Memorandum to the Employees of the FCA, Jan. 6, 1940, copy in files of Agricultural History Branch, USDA.

¹³ Letter, Henry A. Wallace to the President, Dec. 13, 1939; Letter, Paul H. Appleby to Rudolph Forster, Executive Clerk, the White House, Dec. 13, 1939, Secretary's Records, USDA, National Archives.

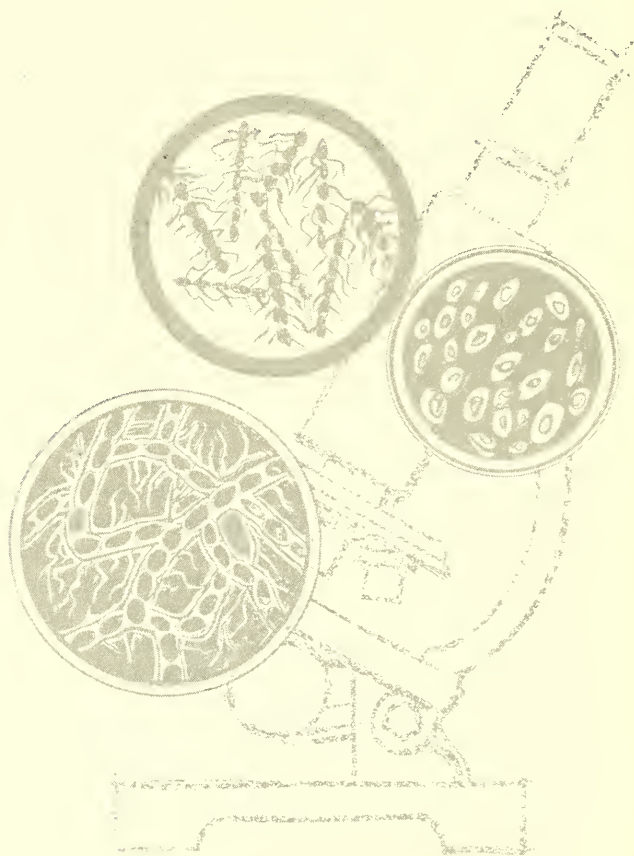
¹⁴ White House Press release, Dec. 20, 1939.

¹⁵ 4 F.R. 2731; 53 Stat. 561.

¹⁶ Henry A. Wallace, Rural Electrification as Part of the National Farm Program, U.S. Department of Agriculture, Press release, Sept. 18, 1939.

¹⁷ 49 Stat. 115.

¹⁸ 49 Stat. 1363.



*Science is not like wheat
or cotton. It cannot be
overproduced.*

Research, Education, and Service, 1933-1940

Scientific research in the Department of Agriculture was under attack in 1933 and 1934. Secretary Henry A. Wallace pointed out on January 17, 1934, that \$17.5 million was spent on research in 1932, but, with reduced appropriations and restrictions imposed by President Roosevelt's economy order, only \$11 million would be available in 1935. The Secretary then said:

I happen myself to be extraordinarily concerned with the research work, because, so far as scientific research in the Agricultural Department is concerned, if it is not done there, or is not done by the States, it is not likely to be done. Scientific research in the industrial field can be supported by private funds, but in agriculture it either is done by the use of State or Federal funds, or it is not done at all. . . .

I have been very fearful, in connection with our crop-control activities, that the public mind and the congressional mind would say, this is all foolishness, reducing crop production at the same time we are trying to find more efficient methods; that it is foolishness to appropriate money for scientific work. My own view on that has been that we should get the maximum efficiency possible, but should control the application of that efficiency so it does not cause damage. . . .

It will be the Nation which will suffer if the scientific work is discontinued. I know of my own personal knowledge that very small sums invested that way have increased the efficiency per hour of the man-labor on farms very greatly. A dollar of investment by the Government for some of these forms of activity brought back a hundred dollars. That kind of thing has happened again and again (283, 1935, p. 3).

The man who thus spoke was an outstanding geneticist—a man who later was to say: "Scientific understanding is our joy. Economic and political understanding is our duty" (369, p. 31). "Henry A. Wallace," wrote Gove Hambidge, then editor of the new-type yearbooks, had "a deep interest in quite an extraordinary range of scientific problems." Hambidge continued:

I think Henry Wallace will live as one of the true galvanizers of scientific research in agriculture—and this in a period when major attention in the Department, as elsewhere throughout the government, has necessarily been given to economic and social questions (97, pp. 191-193).

Reorganization of Scientific Agencies

The financial problem was settled by attacking it in two ways. The Agricultural Adjustment Administration, the Civil Works Administration, and other emergency agencies assigned funds for research programs. Then, within a few years, Congress established new facilities and appropriated funds for staffing these facilities.

The Department lost several great research leaders through retirement in the early 1930's. Among those whose retirement left gaps were C. L. Marlatt, who had spent 45 years in the fight against insects; William A. Taylor, longtime Chief of the Bureau of Plant Industry; Vernon Bailey and Theodore Sherman Palmer, veteran scientists of the Bureau of Biological Survey; and David Fairchild, who had scoured the world for plants new to the United States. Robert Young Stuart, head of the Forest Service, met untimely death by accident. A new generation of scientists had to be brought into the Department and given experience.

The Secretary made a number of shifts in the responsibilities of the scientific agencies between 1933 and 1940. The Bureau of Entomology, the Bureau of Plant Quarantine, and the plant disease control and eradication work of the Bureau of Plant Industry were combined into the new Bureau of Entomology and Plant Quarantine on July 1, 1934.¹ Secretary Wallace reported earlier that the consolidation meant "more effective administration, as well as a certain amount of economy" (283, 1935, pp. 318-319, 6).

At the same time that the Secretary reported on the consolidation, William A. Jump, Budget Officer of the Department, stated that the position of Director of Scientific Work was being abolished. Established in 1921, this position had been held by Elmer D. Ball until 1925. He had been succeeded by Albert F. Woods who retired in 1934. Woods had worked previously in the Bureau of Plant Industry, had been dean of Minnesota State Agricultural College, and had served as president of the University of Maryland. The position of Director of Scientific Work was abolished on June 30, 1934 (312, no. 3021-34).

The research program of the Department was greatly expanded in 1935 when Congress enacted the Bankhead-Jones Act.² It involved research both by the Department and by the State agricultural experiment stations. Its general administration was assigned to the Office of Experiment Stations, then headed by James T. Jardine.

A year later, Jardine's responsibilities were increased, when the Secretary of Agriculture, "in order to promote cooperation in the planning and coordination of research, both within the Department and with the States and other agencies participating in agricultural research," designated the Chief of the Office of Experiment Stations as Director of Research for the Department. The new

Director was to have general direction of the planning, development, and coordination of the Department's research program, and was to cooperate with the bureaus in the planning and execution of research work. He was to continue to be responsible for the activities of the Office of Experiment Stations (306, no. 689).

The Director of Research brought a wealth of experience to his new post. James T. Jardine had joined the Forest Service in 1907. In 1920, when he left to become director of the Oregon Experiment Station, he was in charge of range investigations and surveys for the Forest Service. In 1931, Jardine returned to the Department as Chief of the Office of Experiment Stations. In addition to this post, which he held until his retirement in 1946, he served as Director of Research from 1936 until 1941.³

A Bureau of Agricultural Chemistry and Engineering was established effective October 16, 1938. It combined several functions of the former Bureaus of Chemistry and Soils and of Agricultural Engineering (306, no. 784). Other functions of the two bureaus were assigned to the Bureau of Plant Industry and the Soil Conservation Service. This change was part of a major reorganization of the Department attempting to bring about further centralization of the decisionmaking functions of the Secretary.

Major departmental reorganizations during this period affected both the scientific and economic research of the Department. These are discussed in the following chapter. Changes in connection with the addition of research functions and facilities are discussed in the following sections dealing with facilities and programs.

New Facilities for Broader Programs

The entire scientific research program of the 1930's benefited from three major developments with respect to facilities. First, the Beltsville Research Center, now called the Agricultural Research Center, was reorganized and expanded. Second, Congress, through the Bankhead-Jones Act, provided for regional laboratories to conduct research of basic importance. Third, Congress established four regional research laboratories to develop new uses and outlets for farm products.

The Beltsville Research Center began its much-needed expansion when the Federal Emergency Administration of Public Works and other agencies allocated funds for the construction of new facilities. The Arlington Farm was the Department's main research center in the Washington area before the expansion at Beltsville, Md. The Arlington, Va., site could not be expanded further, and the Department was under some pressure to release the land for other uses. Other sites in the area then being used by the Depart-

ment seemed out of place. The animal disease station in Bethesda, Md., was surrounded by fine residences, and obviously should be moved. The experimental greenhouses on the Mall between 13th and 14th Streets were out of place for the future development of the city of Washington. Many small facilities, such as a building in Somerset, Md., for work on bee culture, and a small installation in Takoma Park, Md., for studying the control of insects, would be more useful and less expensive if they were located at a central station. Availability of funds for new construction thus met a longfelt need.

On August 28, 1934, the Secretary of Agriculture stated that in view of the plans of several bureaus to conduct activities at Beltsville, a Director, appointed by the Secretary, would be responsible for the general administration and operation of the center. The Director represented the Secretary and the chief of each bureau conducting activities at the center (306, no. 648).

Research using the Beltsville facilities was carried on by many agencies, each of which contributed to increasing man's total store of knowledge. At the same time, most research was put to immediate use. The Beltsville Small White turkey, developed by scientists of the Bureau of Animal Industry from 1934 to 1944, is an outstanding example of applied research (174).

Both consumers and the trade were interested in a small turkey suitable for small families and small ovens. Such a turkey was obtained by crossing several standard varieties. The bronze and white Holland were predominant, with admixtures of the Black, Narragansett, wild, and imported white Austrian varieties. For many years after Beltsville Small White turkeys went on the market, they consistently brought a higher price than the larger varieties.

Regional Research Laboratories

The Bankhead-Jones Act of June 29, 1935, represented a major step forward in research. The Secretary of Agriculture, through the Department, experiment stations, and land-grant colleges, was to conduct scientific, technical, economic, and other research into laws and principles underlying basic problems of agriculture in its broadest aspects; to conduct research to improve the quality of agricultural commodities; to develop new and improved methods for production and distribution; to discover uses for farm products and byproducts; and to study the conservation, development, and use of land and water resources for agricultural purposes. In addition, new funds were authorized for the further development of the cooperative extension system.⁴

The Secretary of Agriculture wrote to the directors of the State agricultural experiment stations on September 11, 1935, outlining

some of the research possibilities under the new act, and listing specific points as a guide to the payment, administration, and use of the Bankhead-Jones funds by the stations. Discussions were held with the Department's scientific bureaus, the land-grant colleges, and the State experiment stations, with respect to the location of the regional research laboratories, and suggestions of the Association of Land-Grant Colleges and Universities were studied. On December 19, 1935, the Department issued a statement of policy regarding new laboratories.

The policy, as explained by James T. Jardine, who represented the Department in working out the locations of the laboratories, was to select regional laboratory projects on the basis of joint suggestions from the directors of the State experiment stations in each region and from the bureau chiefs of the Department. The locations of laboratories would be determined on the basis of technical needs of proposed research and facilities available. Whenever feasible, laboratories would be located at an existing Federal or State experiment station or branch. Other matters, such as the nature of the research to be undertaken, the relationships of the laboratory and its program to the State stations and their programs, and the part each agency would take in the program, were to be worked out through joint conferences of the State experiment station directors and representatives of the Federal bureaus concerned (*14, 1936, p. 178*).

By 1940, as a result of the Bankhead-Jones Act, nine regional laboratories devoted to special types of research had been established. One was established in 1935 at Charleston, S.C. It was devoted to research leading to improvements in vegetables. Three were established in 1936. The first, at State College, Pa., was to work on the improvement of pastures. Another, at Urbana, Ill., was to investigate industrial uses of soybeans. Research on swine breeding was to be carried out at Ames, Iowa. By 1937, planning had advanced to the point where four new regional laboratories could be established. Sheep breeding was to be studied at Dubois, Idaho, while animal disease research was assigned to a new laboratory at Auburn, Ala. Improving the viability of poultry was to be studied at East Lansing, Mich., and the control of salinity of irrigation waters at Riverside, Calif. Finally, in 1939, a laboratory was established in Ithaca, N.Y., for research on the relation of soils to plant, animal, and human nutrition.⁵

Each of these laboratories, over the years, contributed to the solution of particular farm problems, and added to basic knowledge. The work of the Regional Swine Breeding Laboratory at Ames, Iowa, may be cited as an example. This laboratory was established under the Bankhead-Jones Act as a cooperative endeavor of State experiment stations in Illinois, Indiana, Iowa, Minnesota, Missouri, Nebraska, Oklahoma, and Wisconsin and the Department. The experiments with different breeds of hogs and the attempts by moderate inbreeding to develop strains of hogs best suited to the

needs of American farmers were encouraged by the great success of hybrid corn.

Early in World War II, the station reported with respect to inbreeding of hogs that there had been a slight decrease in fertility, vitality, and rate of growth as inbreeding had advanced. In the better lines, however, the decline had not been enough to be serious. The major goal of developing inbred lines which would provide more rapid and economical gains was being achieved. Measures or standards of appraising hogs and their carcasses had been studied with some success (59).

In speaking of the work of the various laboratories before the Association of Land-Grant Colleges in 1941, James T. Jardine said:

I might add that the findings of the Soybean Laboratory to date, the facilities, and the staff are very helpful in connection with problems arising out of the Defense program. I, personally, feel that the effective service which this Laboratory can render, which could not have been rendered immediately and effectively if it had not been for the work to date, would be of greater value to the Nation and to agriculture in meeting its responsibilities than the expenditures to date on the entire Bankhead-Jones laboratory program (14, 1941, p. 164).

New Uses for Farm Crops

The theme that new scientific, chemical, and technical uses for farm products would greatly widen the markets for such products and thus increase demand and decrease possible surpluses recurs again and again in the literature of the last 40 years. Research has made farm products the basic raw material for innumerable useful items. The results have not been the panacea for the farm problem some observers had expected, but they have been a vital part of American patterns of production and consumption. Neither the research nor its results have remained static.

In 1938, Congress authorized establishment of four regional laboratories to develop new uses and outlets for farm products. This provision was one part of the Agricultural Adjustment Act of February 16, 1938, indicating that such research was regarded as a significant approach to the problem of production adjustment.⁶

The Director of Research was assigned responsibility for planning and coordinating the research programs of the new laboratories. The Bureau of Agricultural Chemistry and Engineering was assigned responsibility for operating and staffing the laboratories (306, nos. 774, 789). The laboratories, which were to provide regional coverage, were established at Peoria, Ill.; New Orleans, La.; Wyndmoor, Pa.; and Albany, Calif. The buildings were completed and work was started in 1940 and early 1941 (104).

Research workers in the four new laboratories were destined to develop many distinctive and valuable uses for farm products during the next 20 years. Some of their research results are discussed in subsequent chapters.

While the new facilities at Beltsville and in various parts of the United States also were used in later years to help achieve breakthroughs in nearly every aspect of agricultural science, research of every type was making its contribution to the emergency action programs and to better farming and marketing throughout the 1930's.

Research and the Great Depression

It is impossible to classify the final results of any research since, by its very nature, most worthwhile research provides the basis for future research as well as the basis for action. At the same time, research can often make a virtually immediate contribution to the handling of a particular problem.

Economic research, in particular, is often called upon for determinations useful or necessary in carrying out a particular program. The Bureau of Agricultural Economics, which was responsible for economic research during the 1930's, carried out many such short-range projects as well as continuing or long-range projects. For example, during the spring of 1933 it became necessary for the Agricultural Adjustment Administration to have county estimates of acreage, yield, and production of wheat, corn, cotton, rice, and tobacco. Such detailed data were not available. The entire staff of the Division of Crop and Livestock Estimates in Washington and in its 40 field offices was employed over a period of several weeks in preparing these estimates. At the same time, the Bureau's regularly collected data on prices at the farm were used as a basis for determining the official parity price and the processing taxes (249, 1933, p. 1).

Studies of adequate diets at various levels of living, initiated by the Chief of the Bureau of Home Economics, Louise Stanley, and carried out by Hazel K. Stiebeling and others, were to prove of major importance in departmental planning. The work began in 1930 for use in drought-stricken areas and regions of unemployment. In 1933, these diets were further modified to meet emergency conditions and were published as *Diets at Four Levels of Nutritive Content and Cost* and *Food Budgets for Nutrition and Production Programs*. These and related studies that followed were used in planning relief programs, but, even more important, they provided the basis for estimating the food products which would be needed if Americans were to have an adequate diet (262, 1933, p. 1; 1934, p. 4).

Research Support by Emergency Agencies

A number of the special research programs undertaken were financed by the Agricultural Adjustment Administration, others by the Civil Works Administration. The latter projects had the objective of increasing employment as well as of collecting basic research data. These included a farm housing survey, a special inquiry on prices paid by farmers, a compilation of data on tax delinquency and land transfers, a compilation of prices and other data on cotton, the compilation of an index to sources of consumption statistics, and the preparation of historical series on foreign trade (262, 1934, 1935).

Other studies during this period were financed by other agencies responsible for expending relief funds. The Works Progress Administration sponsored a wide-scale study of consumer purchases by the Bureau of Home Economics and the Bureau of Labor Statistics. Measurements of children were studied by the Bureau of Home Economics in cooperation with the National Youth Administration. The Bureau of Plant Industry carried out a study of sprays containing nicotine and other plant substances with Public Works Administration funds. Investigations of soils and vegetation for selenium content were made during 1934 and 1935 under an allotment of emergency funds from the War Department. Investigations and surveys of grain quality in marginal areas were made by the Bureau of Chemistry and Soils with emergency funds.

Production of sweetpotato starch provides an illustration of practical cooperation between research workers and a relief agency to establish a new industry. Pioneer experimental work on sweetpotato starch was begun at the South Carolina Agricultural Experiment Station in 1895 and was continued for about 15 years, but this research did not lead directly to success in producing a commercial starch. During the depression years, scientists in the Bureau of Chemistry and Soils undertook to develop a sweetpotato starch that could compete with certain imported starches. While laboratory work was still in progress, producers urged that practical application be made of the research. In 1934, the Federal Emergency Relief Administration established a small starch plant at Laurel, Miss., to insure a market for sweetpotatoes in that area and so provide an income for farm families that would otherwise be on relief. The plant was turned over to a local cooperative for operation.

The Department's research workers used the plant, to some extent, as a pilot operation. Within a few years, sweetpotato starch was being used for the sizing of cloth and paper, the making of adhesives, as laundry starch, and as an ingredient in bakery goods and confections. In 1941, experimental work in this field was taken over by the Southern Regional Research Laboratory in New Orleans (223).

After some emergency projects got underway, they received special research assistance. For instance, the Works Progress Administration, in cooperation with the State of Oregon, established fiber-flax-processing plants in the Willamette Valley. The Bureau of Plant Industry carried on experiments in raising fiber flax, improving seed strains, and devising better retting methods. The Bureau of Agricultural Chemistry and Engineering was given funds in 1938 to carry on research to simplify and mechanize the industry in every way possible. Many of the machines used in the industry were improved and better methods of handling the flax were devised (248, pp. 78-79). Thus, by World War II, the foundations had been laid for any necessary expansion of the industry.

Research for Action Programs

The research projects financed by emergency agencies made their contribution to agriculture during the 1930's, although in some cases the application was not immediate and direct. Research programs undertaken with the aid of Agricultural Adjustment Administration funds, on the other hand, were usually carried out with an immediate program objective in mind.

In some instances, a series of research projects was planned to help make basic changes in the agricultural economy of a particular area. For example, under the Jones-Costigan Sugar Act of 1934, the Agricultural Adjustment Administration allocated some funds from the processing tax collected on sugar to carry out research in Hawaii and Puerto Rico which would lessen their dependency on the one major crop. The first step was to make soil erosion surveys. These were carried out by the Bureau of Chemistry and Soils. Other projects to find controls for various crop and livestock pests and diseases were then undertaken (237, pp. 224-226).

As indicated previously, the Bureau of Agricultural Economics was called upon to expand some of its research and data-gathering projects almost as soon as the Agricultural Adjustment Act of 1933 was approved. As the adjustment programs got underway, the Bureau undertook a number of additional studies for the Agricultural Adjustment Administration, financed by that agency.

Shortly after the adjustment programs became effective, the Agricultural Adjustment Administration asked the Bureau to study the incidence of the processing taxes on wheat, cotton, and hogs. After detailed studies, the research workers found that, except for short periods, processors of these commodities had widened their margins sufficiently to insure that the consumers paid the taxes (251, p. 5).

During 1934-35, a project on regional adjustments in farming was undertaken in cooperation with the Planning Division of the Agricultural Adjustment Administration. Generally, the problem was to determine what the resulting acreage and production would

be if changes were made on a regional basis, indicated as desirable in the light of good farm management and soil conservation goals.

In 1937, a special research project on income parity was undertaken by the Bureau of Agricultural Economics at the request of the Agricultural Adjustment Administration. Its results were used in developing programs under the Agricultural Adjustment Act of 1938. This act also authorized the Department to begin a crop insurance program. The Bureau had been conducting economic and actuarial studies of crop insurance, and even after the Federal Crop Insurance Corporation was established for the insurance of wheat, it continued this research primarily on other crops (249, 1939, pp. 25-26).

Research and Marketing

Foreign trade in agricultural products had been of major importance to both American farmers and consumers since one spring day in 1613 when John Rolfe had watched the loading of his first cargo of tobacco for the British market. During the 1930's, the problem swung from one extreme to another. The depression, which engulfed the world at the beginning of the period, had been marked by a major decline in world trade. Efforts were therefore made to find means of restoring foreign trade in agricultural and other products, as well as to promote domestic trade.

By the end of the 1930's, Europe was at war, and the normal channels of trade were broken. Even earlier, agricultural leaders had become aware of the possibility of war and had taken steps to strengthen hemispheric solidarity and self-sufficiency.

Research provided tools for attacking the problems. On July 16, 1932, the Senate passed a resolution, introduced by Senator Norbeck of South Dakota, requesting the Department and the Federal Farm Board, "jointly or severally, to investigate the restrictions which now exist upon international trade in agricultural products throughout the world" (271, July 16, 1932). The report was prepared in the Bureau of Agricultural Economics and was published in 1933. During the next year, the Agricultural Adjustment Administration allocated \$23,000 to the Bureau for gathering information on outlets for American agricultural products in Europe and the Orient.

A series of studies of price spreads between producers and consumers, begun in 1934 by the Bureau of Agricultural Economics, indicated that costs and charges for transportation, processing, and marketing change only gradually and slowly. Prices at the farm, therefore, fluctuated proportionally wider than retail prices (249, 1936, p. 7).

A new Division of Marketing Research was established in the Bureau of Agricultural Economics in January 1935 to furnish bases for the study of both new and old problems of distribution

and consumption. Inefficiencies in the marketing system would receive particular study in the hope of helping to reduce price spreads between producers and consumers (249, 1935, p. 23).

The Bureau of Agricultural Economics in March 1937 issued a special report on barriers to internal trade in farm products. An extensive survey of Federal, State, and municipal regulations indicated that many inspection laws had been enacted as public health measures, but that others were thinly disguised measures to promote home industries by restricting trade in products from other areas and States (249, 1937, p. 11).

Transportation is an important cost in marketing. Congress, in the Agricultural Adjustment Act of 1938, authorized the Secretary of Agriculture "to make complaint to the Interstate Commerce Commission with respect to rates, charges, tariffs, and practices relating to the transportation of farm products, and to prosecute the same before the Commission." The Secretary designated the Bureau of Agricultural Economics to administer this section of the law. The Bureau's work was to include "assembling of basic data on transportation rates by rail and truck, volume and movement of traffic in agricultural commodities, transportation charges and practices and their effect upon agriculture," and other tasks (306, no. 752). The Bureau established a Division of Transportation to carry out these duties on July 1, 1938.

The food stamp plan, described in a previous chapter, was a new marketing device to make agricultural surpluses available to low-income families at reduced prices. The Bureau of Agricultural Economics, in cooperation with the Surplus Marketing Administration, made a study of the economic and social effects of the plan. This study, presented as *Economic Analysis of the Food Stamp Plan*, proposed several modifications in the plan, but concluded that it undoubtedly benefited low-income consumers.

The Bureau of Agricultural Economics undertook another market- and trade-related study in 1938 in response to a Senate resolution (271, Mar. 29, 1938). This study of flaxseed prices and the tariff was to ascertain why flaxseed prices had been below parity since 1920. It showed: (1) World production was greater in the period following World War I; (2) other oils were displacing flaxseed oil; (3) marketing margins had increased; and (4) there had been no significant increase in the world demand for drying oils (252).

By 1938, the world situation had deteriorated to a point where farsighted leaders were preparing to emphasize agricultural self-sufficiency and to promote closer ties with our hemispheric neighbors. Research was essential for the success of such projects.

The Department had long maintained plant and seed exchanges and other activities with our Latin American neighbors. On May 3, 1939, Congress broadened the possible scope of this relationship by authorizing a program to lend agricultural experts and scien-

tists to the other American Republics.⁷ The supervision of this program was assigned to the Office of Foreign Agricultural Relations when it was established effective July 1, 1939 (306, no. 825).

In an act approved August 9, 1939, Congress authorized the President to render closer and more effective the relationships among the American Republics.⁸ On June 27, 1940, Congress appropriated \$500,000 for cooperation with the American Republics in rubber investigations.⁹ The Office of Foreign Agricultural Relations was responsible for much work under these programs. The Bureau of Entomology and Plant Quarantine, the Bureau of Animal Industry, and the Forest Service were also assigned important research tasks (304, 1940, p. 25). The importance of such activities increased as 1940 gave way to 1941.

Production Research

The 1930's, a period of major change and development in the Department, saw the continuation of man's never-ending war against the natural threats to his food supply. The scientists of the Department have been so successful in the battles waged in this war that their efforts have been taken for granted. Yet, without their work, our great Nation might today be concerned with prospective or actual famine, rather than with its abundance of food.

Some examples of the battles against plant and animal disease may be cited.

In 1934, Marion Dorset of the Bureau of Animal Industry directed the preparation of crystal violet-glycerol vaccine for use against hog cholera. This achievement was credited to the same scientist who had led the first major successful attack on hog cholera in 1903 (225).

About 50 improved varieties of wheat were distributed to farmers in the 1930's. This never-ending chain of new varieties is necessary to thwart the inroads of disease and insects and to maintain or improve yields. Many of the varieties were developed in cooperation with State agricultural experiment stations. For example, Thatcher, the first extensively grown hard spring wheat that is highly resistant to stem rust, was developed in cooperation with the Minnesota Agricultural Experiment Station. Released in 1934, it was grown on 14.5 million acres in the United States and Canada by 1939 (24).

These examples, with others previously cited, indicate that scientific research workers in the Department were meeting new needs while they were carrying on the continuing battle against disease and pests.

Soil and Water Conservation Research

When the Soil Erosion Service, soon called the Soil Conservation Service, was established in the Department of Agriculture, it was given responsibility for the soil erosion investigations and regional experiment stations previously assigned to the Bureau of Chemistry and Soils and the Bureau of Agricultural Engineering (306, no. 665). This research included water as well as soil conservation, and was carried out in close cooperation with the State experiment stations (130).

Research programs went hand in hand with action programs of the Soil Conservation Service. Investigations were made into the character, cause, extent, history, and effects of soil and water depletion and methods for soil and water conservation. The research aimed at developing practical and effective measures to maintain the land or restore it to a usable and profitable condition. A deliberate attempt was made to project research beyond the small-plot stage to whole farms and even entire watersheds, and especially to evaluate the economic effects of conservation work.

Forestry Research and Service

The Forest Service entered 1933 with trained personnel, and with a program for improving the forest. The program, the Copeland Report, has been discussed in a preceding chapter. The Civilian Conservation Corps, the organization of which is discussed in the following chapter, offered the Forest Service manpower for building up the Nation's forest resources. On April 10, 1933, the first quota of 25,000 men was called, and on April 17, the first camp, Camp Roosevelt in George Washington National Forest near Luray, Va., was occupied. During the 9 years the Civilian Conservation Corps program was continued, more than 2 million young men participated, and a vast amount of forest protection, tree planting, watershed restoration, erosion control, and other improvement work was accomplished. At the peak of the program in 1935, the Corps had 520,000 enrollees and 2,652 camps, of which 1,303 camps were assigned to forestry projects (338, pp. 13-14).

The Fulmer Act, introduced by Representative Hampton P. Fulmer of South Carolina and approved August 29, 1935, extended Federal aid to the States in acquiring State forests. It provided for Federal aid in the purchase of lands for State forest purposes.¹⁰

Earlier in the same year, on March 19, 1935, the first tree in the shelterbelt program of the prairie plains region was planted near Mangum, Okla. This was the start of the Prairie States

forestry project, to lessen drought conditions, protect crops and livestock, reduce duststorms, and provide useful employment for drought-stricken people. Under this project, the Forest Service cooperated with prairie farmers in planting strips of trees at right angles to the prevailing winds in the Dakotas, Nebraska, Kansas, Oklahoma, and northern Texas. The work was begun under an Executive order of President Roosevelt, and was continued under authority of the Norris-Doxey Cooperative Farm Forestry Act of 1937. Funds were first provided from appropriations for emergency conservation work, and then by the Emergency Relief Act. In 7 years, more than 217 million trees were planted; 30,000 farmers participated in the program. In 1942, the project was transferred to the Soil Conservation Service to be continued as an activity of the soil conservation districts.

The establishment of the Rocky Mountain Forest and Range Experiment Station at Fort Collins, Colo., in 1935 completed the chain of 12 continental forest experiment stations authorized in the McSweeney-McNary Forest Research Act. In the closing days of the 74th Congress, the first amendment to this act was approved. It authorized a Great Plains Forest Experiment Station badly needed to provide authentic information on successful tree growing for the "treeless" plains and prairie region.

The Forest Service prepared a report on the western range in 1936 in compliance with a resolution introduced by Senator George Norris of Nebraska. It incorporated information obtained by many years of research on range and watershed problems, by special surveys, and by 30 years' administration of National Forests. It contained not only a report on the condition of the western ranges, but a discussion of methods of improvement.

The Omnibus Flood Control Act of June 22, 1936, discussed in a preceding chapter, was of importance to the Forest Service as well as to other departmental agencies. The act recognized that proper forest and range management stabilizes streamflow and reduces flood and erosion damage.¹¹

The Norris-Doxey Cooperative Farm Forestry Act, introduced by Senator George Norris of Nebraska and Representative Wall Doxey of Mississippi, became law on May 18, 1937. It provided for increased technical aid to farmowners in the sound management of their woodlands.¹²

President Roosevelt, on March 14, 1938, in a special message to Congress, requested a study of the forest situation in the United States, particularly with reference to privately owned forest lands. Congress then authorized a Joint Committee on Forestry, under the chairmanship of Senator John H. Bankhead of Alabama, to conduct such a study. The report on "Forest Lands of the United States" cited deplorable conditions in the forest areas of many sections of the country, and recommended "the establishment of a real forest economy in this country which . . . will put to constructive use one-third of our total land area."

The New England hurricane in September 1938 blew down millions of trees. A Northeastern Timber Salvage Administration was set up, under the supervision of the Forest Service, to salvage as much as possible of the blown-down timber. By 1941 more than 700 million board feet of timber had been salvaged. The large amount of down timber greatly increased fire hazards, and the Forest Service cooperated with the State forestry agencies in reducing this danger.

The Library—Basic Research Tool

Research workers need facilities and services. During the 1930's, Department scientists found the facilities of the Library unexcelled in the field of agriculture. This position had been attained under the guidance of Claribel R. Barnett, who served as Librarian from July 1, 1907, until her retirement on November 10, 1940. Under her leadership the Library, by 1940, was the largest library in the world devoted to the many agricultural sciences (67).

Making the Results of Research Known

Research must be known and applied if it is to achieve its greatest use. The Department relied upon two major forces to carry knowledge to the farmer—the Cooperative Extension Service and the Office of Information.

The Cooperative Extension Service, working through county agricultural agents, was greatly strengthened after the Agricultural Adjustment Administration was established, and was thus better able to reach farmers. The State extension services also cooperated with the Soil Conservation Service of the Department in a common attack on problems of soil conservation and helped establish soil conservation districts. In most States, a State soil conservation committee was set up, consisting of the State coordinator for the Soil Conservation Service, the director of the agricultural experiment station, and the director of extension (374).

The second Administrator of the Agricultural Adjustment Administration, Chester C. Davis, publicly recognized the significance of the county agent's role in the early days of the adjustment program:

I would be seriously at fault if I did not express the very great appreciation of the Agricultural Adjustment Administration for the generous support which has been given to us throughout the country by extension workers in the past year and a half. In this effort

your county extension agents, specialists, and supervisors were the front line forces. . . . As I have said publicly before, the difficult field job could not have been handled efficiently without the trained and experienced personnel of the extension staff (23, p. 70).

County agents in all States assumed responsibility for the educational phases of the agricultural adjustment program. They were responsible for explaining and interpreting the act and the administrative rules sent from Washington. In most States, the county agent held one or more educational meetings in every township or community to explain, with the aid of charts prepared by the Department and the State agricultural college, the urgent need for an adjustment program and the benefits to be derived from such a program.

Following these educational meetings, the county agent set up the local machinery, in the form of county and township committees, which assumed responsibility for the program. In some commodity programs the county agent remained the dominant factor, sometimes serving as the local administrator. In other commodity programs the county agent stepped back into an advisory capacity. In spite of the variations which existed within States and regions, it was generally agreed that the county agents' leadership was indispensable in the various commodity programs (23, pp. 70-71). By 1938, county extension agents were giving emphasis to furnishing economic information to farmers and on helping them to plan their operations in terms of all their needs. During that year, over 2,200 county agricultural planning committees organized by county agents were active. These groups were concerned with benefits from the economic and scientific results of research as well as with immediate action programs.

The Office of Information continued to make public the results of research through its Farmers' Bulletins, press releases, other publications, radio programs, and moving pictures. A significant change was made in one of its best known publications, the *Yearbook of Agriculture*. Prior to 1936, the book had presented brief summaries of miscellaneous new developments in agriculture. However, the Secretary's Committee on Genetics, appointed in 1933, had completed a survey of superior germ plasm under the chairmanship of O. E. Reed, Chief of the Bureau of Dairy Industry. The decision was reached to present this material in the 1936 and 1937 yearbooks. At the same time, the statistical data which had served as an appendix to the yearbook was made more readily available through publication as a separate volume.

The new yearbooks, edited by Gove Hambidge, were so successful that the idea of devoting each volume to a special theme was continued. Beginning in 1938, the annual report of the Secretary to the President was omitted from the yearbook and was printed as a separate document.

Social Science Conferences

In the spring of 1939, Under Secretary M. L. Wilson called a series of conferences on the social sciences most concerned with agricultural problems. Participants included leading figures from outside the Department and representatives of the Department. Unfortunately, World War II made many of the projects recommended by the participants impossible of achievement.

The first conference, held April 10–11, 1939, considered agricultural problems from a philosophical point of view. The group gave particular attention to desirable objectives of rural life, adult education work in the Department of Agriculture, and courses of philosophy in colleges of agriculture. Adult education received special attention, since the Department, under the leadership of Carl F. Taeusch, had been sponsoring what were popularly called "schools of philosophy" for agricultural workers and farmer discussion groups (241).

The second conference was devoted to political science, particularly with respect to the function of the reorganized Bureau of Agricultural Economics. It was held April 17–18, 1939.¹³

Cultural anthropology was the subject of the third conference, held May 17–19, 1939. The theme of the conference was that farm problems are social as well as economic problems (119).

A committee of historians met May 22–24, 1939. Current historical work in the Department was discussed by Oscar C. Stine and Everett E. Edwards. The committee concluded that history was of basic importance to understanding agricultural problems and that research in this field should be encouraged. The committee also recommended the establishment of a national agricultural museum. A subcommittee of outside historians later worked with Department personnel, particularly Arthur G. Peterson, toward this goal, but the war brought an end to the endeavor (65).

A conference on social psychology, held May 26–27, 1939, gave particular attention to the proposition that farm problems are human problems. This then brought up the question as to what extent and how rapidly people accustomed themselves to new patterns of behavior by experiencing them.

The rural sociologists met on June 1–2, 1939. Under the leadership of Carl C. Taylor, this group gave particular emphasis to the relation of rural sociology to action programs (6).

Research and Regulation

In 1940, C. W. Kitchen, Chief of the Agricultural Marketing Service, stated in an article in the *Yearbook*:

It should be recognized always that the Federal standards, the inspection methods by which they are applied, and the certification as to grade are based on painstaking and comprehensive research. Continued research, which fully recognizes changes in production and uses, is essential. . . . (124).

Research provided the knowledge essential for programs to control plant and animal disease, for both physical and economic regulatory programs, and for mandatory and voluntary standards and the inspection of farm products.

During the 1930's, research permitted the revision of a number of standards. A new Federal Seed Act, requiring complete and correct labeling of seed shipped in interstate commerce, became effective for imported and agricultural seed on February 5, 1940, and for vegetable seed on August 9, 1940.¹⁴

Standards, both voluntary and mandatory, helped protect producers and consumers. They were of major importance, too, on trading in futures on the commodity exchanges.

Commodity Exchange Administration

The Grain Futures Act of 1922 had been a responsibility of the Department since its enactment. It soon became evident to Department officials and farm groups, however, that the regulatory functions authorized, largely of a factfinding and advisory nature, were inadequate for effective regulation of trading and prevention of market abuses. As early as 1927 the Department began recommending additional legislation. Bills were introduced to strengthen regulation and extend it to other commodities and markets. On January 3, 1935, Representative Marvin Jones of Texas introduced a bill, which, with modification, was to reach these goals. Representative Jones, in reporting upon a modified version of the bill, stated:

The fundamental purpose of the measure is to insure fair practice and honest dealing on the commodity exchanges and to provide a measure of control over those forms of speculative activity which too often demoralize the markets to the injury of producers and consumers and the exchanges themselves.

This bill, passed by the House, extended controls, formerly applied only to grains, to cotton and some other commodities. It provided authority to establish "speculative limits" applicable to individual large speculators. The bill outlawed "puts and calls," wash sales, and "bucketing" in regulated commodities, and made price manipulation and cornering criminal offenses. For the protection of market users and their trading funds, the bill provided for the regulation of commodity brokerage activities, and for the

prevention of cheating and fraud in commodity transactions (279).

The Senate held hearings on the House bill in April 1936. Spokesmen for the grain exchanges testified that the provisions of the bill were both unnecessary and too restrictive. The exchanges pointed out that they had developed self-policing systems which had done away with abuses and emphasized the service they provided through hedging.

A number of farmers' cooperatives and representatives of the three major farm organizations—the American Farm Bureau Federation, the National Farmers Union, and the National Grange—urged Congress to pass the bill. Clifford V. Gregory, editor of the *Prairie Farmer*, summarized this testimony when he said:

. . . the operation of these great grain exchanges, particularly the tremendous speculative purchases and sales . . . cannot help but have a very considerable effect on the price of grain. . . . So the feeling of the farmers in my country is that these institutions cannot properly be regarded as private institutions to the extent that it is the business of no one outside the members what is done on them. They affect the great rank and file of farmers, their prosperity, their prices, too greatly (293).

Congress passed the amendments strengthening Federal regulatory powers in the markets and extending regulation to other commodities, including cotton, butter, eggs, and potatoes. The amended legislation, renamed the "Commodity Exchange Act," was approved June 15, 1936.¹⁵ The Grain Futures Administration became the Commodity Exchange Administration, and subsequently the Commodity Exchange Authority. The act was further amended on October 9, 1940, to cover additional commodities, including soybeans and fats and oils, which had become more important because of national defense needs.¹⁶

Eliminating Disease from Livestock

Congress, in the Jones-Connally Act of April 7, 1934, and the amendments of August 24, 1935, to the Agricultural Adjustment Act, authorized appropriations to enable the Department to carry out experiments to find ways of eliminating disease from beef and dairy herds, and to pay compensation to the owners of the cattle eliminated.¹⁷ The Bureau of Animal Industry used the funds to carry on research on several diseases. The tuberculosis eradication campaign was virtually completed. Work on Bang's disease or brucellosis was intensified; Bureau scientists developed

a stained antigen for use in better diagnosing the disease. By the end of 1939, 11 million cattle were under supervision in the project to control brucellosis.

Eliminating Plant Diseases and Pests

Special appropriations, emergency relief programs, and the aid of the Civilian Conservation Corps enabled the Department to apply the knowledge it had gained through research to programs aimed at eliminating a number of plant diseases and pests.

The mild winter of 1933-34, and the drought of 1934, the worst ever recorded in this country, were favorable to grasshoppers and chinch bugs. Hordes of these pests descended upon farms already stricken by depression and drought. Local papers carried stories of the marching chinch bugs and the swarms of grasshoppers, destroying all living plants in their way.

The grasshopper infestation was particularly severe in North Dakota, South Dakota, Minnesota, Wisconsin, Wyoming, Montana, and Idaho, with slightly lighter infestations in a number of neighboring States. The Bureau of Entomology, using funds especially appropriated by Congress, distributed 78,000 tons of poison bran bait to the States on the basis of the area infested. Satisfactory control was secured in many areas (261, 1934, pp. 7-8).

Chinch bugs did severe damage to small grain and corn in Illinois, Missouri, Kansas, Iowa, and Indiana, and extensive damage in several neighboring States. The Bureau of Entomology, again with the aid of a special appropriation, assisted the States in fighting the invasion.¹⁸ It was impossible to save the infested small grains, but in many cases the corn crops were saved by erecting barriers against the invaders. A creosote line barrier was constructed by plowing a furrow around the field to be protected and by pouring a line of creosote on the side of the ditch away from the bugs. Holes were then dug at intervals in the trench. As the bugs turned aside from the creosote, their line of march was turned, and they fell into the holes, where they were easily destroyed. Nearly 9 million rods of barriers were constructed in 1934 (362).

Special appropriations, regular funds, relief aid, and Civilian Conservation Corps assistance enabled the Department to make broad attacks on a number of serious tree and crop pests and diseases. At the peak of the season in 1936, 25,242 workers were employed in 1,497 counties in 44 States. The activities included control of white pine blister rust and gypsy moth, and eradication of phony peach, citrus canker, barberry, and Dutch elm disease.

Agricultural Research and the General Welfare

During the depression-ridden 1930's, some hostility to agricultural research, particularly as it tended to increase and improve crop and livestock production, was expressed. The examples cited of its application show, however, that research benefited the general public as it was helping the farmer. Improved production meant better food at reasonable cost. Standards and inspection protected the public from substandard or unwholesome products. Disease and pest research and control insured the consumer more healthful food products. Research permitted programs aimed at preserving the Nation's resources—its soil, forests, water, and wildlife. Research leading to the stabilization of farm incomes and farm employment aided the entire economy by providing better markets for the Nation's industry, particularly for fertilizer, farm machinery, building supplies, and other goods necessary for farm production.

Thus, research, by adding to man's store of knowledge, had its very practical applications. And research, like any other vital force, had to grow or die. The Secretary of Agriculture, in his annual report for 1940, stated:

Science, of course, is not like wheat or cotton or automobiles. It cannot be overproduced. It does not come under the law of diminishing utility, which makes each extra unit in the stock of a commodity of less use than the preceding unit. In fact, the latest knowledge is usually the best. Moreover, knowledge grows or dies. It cannot live in cold storage. It is perishable and must be constantly renewed. Static science would not be science long, but a mere junk heap of rotting fragments. Our investment in science would vanish if we did not freshen it constantly and keep in training an alert scientific personnel.

¹ 48 Stat. 467.

² 49 Stat. 436.

³ Trullinger, R. W., James T. Jardine, 1881-1954, Mimeographed, 4 pp., Oct. 26, 1954.

⁴ 49 Stat. 436.

⁵ Trullinger, James T. Jardine.

⁶ 52 Stat. 31.

⁷ 53 Stat. 652.

⁸ 53 Stat. 1290.

⁹ 54 Stat. 629.

¹⁰ 49 Stat. 963.

¹¹ 49 Stat. 1570.

¹² 50 Stat. 188.

¹³ Records of Bureau of Agricultural Economics, National Archives.

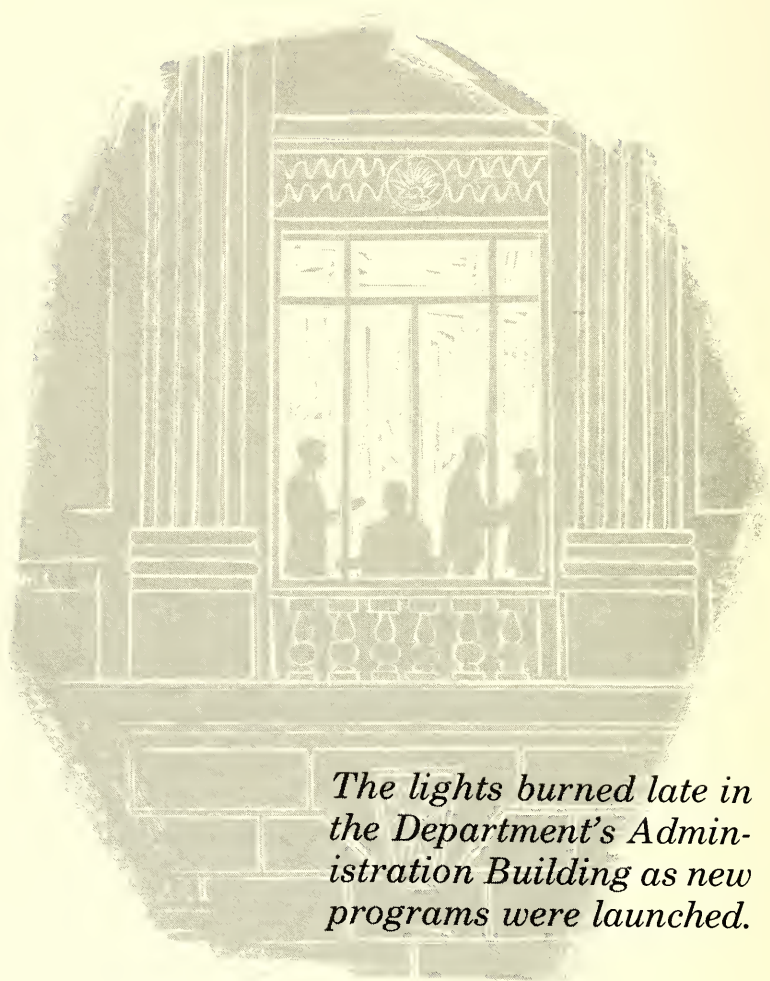
¹⁴ 53 Stat. 1275.

¹⁵ 49 Stat. 1491.

¹⁶ 54 Stat. 1059.

¹⁷ 48 Stat. 528; 49 Stat. 750.

¹⁸ 48 Stat. 926.



The lights burned late in the Department's Administration Building as new programs were launched.

Administration of the New Department of Agriculture

Rapid accumulation of new functions and new agencies with economic programs reaching directly down to the individual farmer had so transformed the Department of Agriculture by 1938 that Secretary Wallace was speaking of the "new Department of Agriculture." The new "action agencies," he noted, drew on the older scientific bureaus for most of their "fundamental information" (283, 1939, pp. 1, 5).

The "new Department of Agriculture" had been launched, on May 12, 1933, with the organization of the Agricultural Adjustment Administration. The personnel required to carry out its various programs exceeded those of all the other bureaus, agencies, and offices of the Department combined, and the funds handled by the new Administration exceeded the combined expenditures of the rest of the Department (213, p. 25). However, it was not the size of the Agricultural Adjustment Administration but the nature of its program that almost overnight changed the Department of Agriculture from one of the world's greatest research and educational institutions into an agency continuously besieged by people demanding a hearing for their desperate financial needs, their grievances, their panaceas, and for their sectional, commodity, and business interests.

Writing in 1934, Secretary Wallace described the siege:

The corridors of the Administration Building were crowded with farmers, farm leaders, processors, and reporters, each with dozens of insistent questions, few of which could be answered then and there. From early morn until midnight and often later, delegations of dairymen, cotton growers, wheat growers, cling peach producers from California, and many others filed in and out of our offices seeking the way to make the new machinery whirl into action in their behalf. Those were hectic days. Somehow we got through them though it was a rare day when an irresistible desire didn't crash into an immovable fact, with heavy damage to frayed nerves (366, pp. 169-170).

The pressures and differences did not stop at the doors of the Department. Within the Department and within the Agricultural

Adjustment Administration, there were sharp cleavages as to the form the new programs should take and how they should be administered.¹ Turnover of personnel in high places in the Department and the new Administration during the early years of the adjustment programs was not incidental—it was indicative of sharp and, at times, bitter controversies over fundamental policy issues (136, pp. 393–409; 78; 116; 198). The Agricultural Adjustment Administration was a forerunner of other agencies that were to be incorporated into the old Department and coordinated with it and with each other. These agencies included the Soil Conservation Service, which came into the Department as the Soil Erosion Service in 1935; the Federal Surplus Commodities Corporation, which came under the Department's direction in 1935; the Resettlement Administration, which came into the Department in 1937; the Federal Crop Insurance Corporation established in 1938; and the Commodity Credit Corporation, the Farm Credit Administration, and the Rural Electrification Administration, all of which were transferred to the Department during 1939. The tremendous increase in the administrative responsibilities of the Department is also indicated by the increase in the size of total appropriations—for 1932 they were \$279,616,193 and by 1939 they had risen to \$1,293,048,172. In addition to appropriations made directly to the Department, it received an allocation of \$224,895,417 in relief funds for the fiscal year 1939 (283, 1940, pp. 66, 68).

Office of the Secretary

The immediate Office of the Secretary was enlarged to meet the greatly increased workload and the converging pressures. Its needs could no longer be met by an Assistant Secretary, two Assistants to the Secretary, an Assistant to the Assistant Secretary, and a few stenographic, clerical, and other aids, a staff which had been considered adequate for Secretary Hyde in 1932.

The staff assembled by Secretary Wallace was not only larger but markedly different in character from that which had served previous secretaries. Rexford G. Tugwell, a professor of economics at Columbia University who had served as principal adviser on agriculture to President Roosevelt before the election, was selected for the position of Assistant Secretary. Tugwell took the oath of office as the 15th Assistant Secretary of Agriculture on March 7, 1933.

As Roosevelt's adviser on agriculture, Tugwell had discussed agricultural policy with Henry A. Wallace, M. L. Wilson, and other farm leaders before the election, made arrangements for discussions between them and Roosevelt, and arranged for them to assist

in the drafting of candidate Roosevelt's major speech on agriculture. Tugwell had also played an important role in presenting to Governor Roosevelt the domestic allotment plan which they advocated and which was to serve as the basis for the Agricultural Adjustment Act. Tugwell had been among those who urged the selection of Wallace for the Cabinet position (*197, pp. 469, 473; 136, pp. 318-324*). Under these circumstances, it was natural for Wallace to select Tugwell for the second position in the Department of Agriculture. Selection of a professor of economics from east of the Alleghenies without land-grant college connections, who had a reputation for brilliant and unorthodox ideas, symbolized change in the Department of Agriculture that was to plunge it into the swift moving current of controversial economic and social reforms.

To advise on the complex and urgent policy decisions, with far-reaching effects on farm people and on the national economy, Secretary Wallace established, by March 6, 1933, the position of Economic Adviser to the Secretary.² This new position was filled by Mordecai Ezekiel who had served as an economist with the Federal Farm Board and with the Bureau of Agricultural Economics of the Department. He had assisted in the development of the domestic allotment plan and had participated with Wallace, Wilson, and Tugwell in drafting speeches and proposals on the subject during the preceding year (*10*). Other economists working directly with the Secretary were Louis Bean and Gardiner Means. Bean's experience with forecasting was particularly helpful to the Secretary when decisions had to be made on the application of adjustment programs to specific commodities and problems. Bean, like Ezekiel, had served on the staff of the Bureau of Agricultural Economics. He was Economic Adviser to the Agricultural Adjustment Administration. Ezekiel and Bean developed and applied statistical techniques that greatly facilitated the economic projections necessary for planning future programs. Ezekiel was a major adviser in drafting the new farm legislation and in the selection of professional personnel to carry it out. Gardiner Means' experience and interest were in studying and analyzing the modern corporation. His assignment was to advise the Secretary of Agriculture with respect to programs and activities outside the Department that were likely to impinge on agriculture, particularly with respect to the inflexibility of industrial prices. He was carried on the payroll of the Bureau of Home Economics and loaned to the Secretary's Office under the title of Adviser on Finance (*141, pp. 95-97; 136, pp. 354-355; 86, pp. 308-310*).

To find time for making major policy decisions, the Secretary needed assistance in his job of administering a large Government department responsible for numerous varied but interrelated functions and activities. New administrative machinery had to be devised to carry out adjustment and other programs, and these programs had to be related to and coordinated with other activities of the Department.

The problem was not a new one, but the administrative burden was much greater than that which had faced any previous Secretary of Agriculture. The nature and number of administrative problems made it necessary to increase the number of assistants and to widen the scope of their work.

The first administrative assistant to come to Secretary Wallace's aid, and the one who remained with him throughout his period of office as Secretary of Agriculture, was Paul H. Appleby. Asked to help with the initial problems of getting the organization underway, Appleby agreed to remain as a member of the staff, officially joining it on March 14, 1933.³ He soon became the Secretary's principal adviser on administrative organization. Secretary Wallace has made the following evaluation of Appleby's contribution to the administration of the Department: "He made a unique contribution to administrative techniques harnessed to the highest concept of the general welfare."⁴

Appleby and his associates also served as a channel through which major administrative problems and policy questions were passed to the Secretary for final action after they had been given thorough consideration by appropriate personnel within the Department, and through which the Secretary referred problems for further study or action by bureau chiefs and agency heads. With the help which Appleby and other assistants were able to give in securing preliminary study of problems cutting across agency lines, in preparing replies to queries received by the Secretary, in answering voluminous correspondence, and in discussing public policy and Government programs with groups and individuals whom the Secretary or the Assistant Secretary could not fit into their crowded schedules, the Department gained a reputation as one of the best administered agencies of the Government. Louis Brownlow, who served as Chairman of President Roosevelt's Committee on Administrative Management, has said: "The administration of the Department during this period was recognized as one of the most brilliant in the history of government."⁵

Under Secretaries and Assistant Secretaries

Assistants and technical advisers could help the Secretary organize his work more effectively, but they could not put into effect matters requiring authorization by an "Acting Secretary." Many administrative memorandums, orders, dockets, and other actions required the attention and the signature of the Secretary or the Acting Secretary of Agriculture. Influential groups and individuals felt their prestige and the importance of their business required that they confer with the Secretary or the Assistant Secretary. Calling attention to the increased pressure on the Secretary's Office, which could be roughly measured as 400 percent by the volume of incoming mail, Secretary Wallace asked the House

and Senate Appropriations Subcommittees on January 17 and March 6, 1934, to make provision for an Under Secretary of Agriculture.

Committee members were advised that the precedent had been established by the creation of such a position in the State and Treasury Departments, and that the Departments of Commerce, Interior, and Labor had two Assistant Secretaries. Wallace's statement indicated that the Chief of the Weather Bureau had had to be drafted to sign documents as Acting Secretary when the Secretary and Assistant Secretary could not handle all the work, because he was the only other Presidential appointee in the entire Department. This was an unsatisfactory situation, since the location of his office, in another part of the city, and the specialized nature of his work meant that he had to sign documents about which his "col-lateral information" was "to say the least meager" (283, 1935, pp. 1, 4-6; 298, 1935, pp. 1-2).

In letters of March 7, 1934, to the chairman of the House and Senate Committees on Agriculture, Secretary Wallace urged that the position of Under Secretary be established by a joint resolution. Secretary Wallace noted that the position had been included in the budget estimates but had not been included in the agricultural appropriation bill, "presumably because it was construed to be legislation" which should be considered by the Committees on Agriculture. The chairman of the Senate Committee on Agriculture and Forestry delayed reporting the communication to his committee. He explained later that he not only thought the position was unnecessary but he "did not like the idea of America aping certain procedures of Great Britain" (271, June 8, 1934).

The appropriation bill for the Department of Agriculture for the fiscal year 1935 was amended on the Senate floor to include a provision establishing the position of Under Secretary of Agriculture (271, Mar. 14, 1934). The Appropriation Act containing this provision was approved by the President on March 26, 1934.⁶

Tugwell was not confirmed as the first appointee to the new position until June 14, 1934. Objections were raised to filling the second most important position in the Department by a man who was "not of the soil" (271, June 8, 1934). Objections were also raised to published statements by the nominee concerning the need for economic and governmental reform. Tugwell resigned from the position of Assistant Secretary, effective June 18, 1934, to become the first Under Secretary of Agriculture, effective June 19, 1934.⁷

M. L. Wilson succeeded Tugwell as Assistant Secretary on July 2, 1934. Wilson, who returned to the Department of Agriculture from the Subsistence Homestead Division of the Department of the Interior, was "a man of the soil." His feeling for the land included a concern for the people on the land. He had an intense interest in new ideas and in an experimental approach to Government programs. His belief in the need for Government planning

and Government action to solve farm problems was matched by a strong conviction that farmers should take an active part in both the planning and operation of Government programs.

Wilson's creative mind was continually seeking new solutions for the social and economic problems of farm people. His method of approach and his background as a farmer, county agent, college professor, and State extension leader made it possible for him to experiment with new ideas and new programs without becoming a center of controversy.

When Under Secretary Tugwell resigned, telling himself "that the removal of so controversial a figure . . . would perhaps soften the hearts of legislators" (231), Wilson became the second Under Secretary of Agriculture on January 2, 1937. He was succeeded in this position on March 1, 1940, by Claude R. Wickard, who had been serving as Director of the North Central Division of the Agricultural Adjustment Administration (12, p. 131). Harry L. Brown, who had risen in the Georgia Extension Service to the position of Director, was appointed to succeed Wilson in the position of Assistant Secretary of Agriculture. Brown became the 17th Assistant Secretary on January 2, 1937. He was succeeded in the position of Assistant Secretary by Grover B. Hill, a Texas ranchman who had been serving in the Washington office of the Agricultural Adjustment Administration since November 1936. Hill became the 18th Assistant Secretary of Agriculture on December 21, 1939.⁸

Organization for Personnel and Budget

The increased pressure of work on the Secretary and his immediate assistants also bore down heavily on the Office of Personnel and Budget Administration. This office was headed by W. W. Stockberger. Its Assistant Director, W. A. Jump, also continued as Budget Officer of the Department. A Secretary's memorandum effective June 1, 1934, formally divided the work by establishing an Office of Budget and Finance as a separate organization (306, no. 646).

Warner W. Stockberger continued as Director of Personnel until July 1, 1938, when he became a special consultant to the Secretary (312, no. 1940-38). Roy F. Hendrickson, who had served as assistant to Under Secretary Wilson, succeeded Stockberger as Director of Personnel.⁹ The Director of Personnel was given responsibility for exercising general oversight and supervision of personnel and related activities of the Department. He was also responsible for representing the Department in its relations with the Civil Service Commission and other executive departments on business concerning personnel.

The Director of the new Office of Budget and Finance, W. A. Jump, was given the title of Director of Finance and continued in the position of Budget Officer. As Director of Finance, he was to be the general agent and representative of the Secretary in matters of budget and finance, and to exercise general oversight and supervision of fiscal, accounting, purchasing, and related work of the Department. He was also given responsibility for "general oversight of the business of the Department with the Budget Bureau, the General Accounting Office, the Treasury Department, the Appropriations Committees, and with other departments of the Government and agencies doing business with the Department" (306, no. 646).

Jump and his staff developed a system for dividing the Department's budget into specific financial projects representing divisions of the Department's work. This type of budget made it easier for the Secretary and for Congress to relate appropriations and expenditures to work programs and to policy decisions. A contribution to budget preparation, it was used in modified form by other agencies in Washington and was a step in the development of budget classification which led to present-day "performance budgeting" (363).

Jump made a clear distinction between his authority as Budget Officer for the Department and his responsibility to advise the Secretary as Director of Finance. As adviser to the Secretary, he worked closely with Paul Appleby, other assistants to the Secretary, and other officials in the Department who were given special assignments by the Secretary to help coordinate the activities of agencies dealing with different segments of a common problem.

Coordination of Land Policy Activities

Coordination of Department activities concerned with land policy became a major concern of the Secretary's Office following the transfer of the Soil Erosion Service, later to be renamed the "Soil Conservation Service," to the Department in March 1935.¹⁰

Secretary Wallace gave Milton Eisenhower, Director of the Office of Information, the special assignment of helping to relate the work and organization of the Soil Erosion Service to the policy and operating procedure of the Department. He was asked to advise with Hugh Bennett, head of that Service, on this assignment (283, 1937, p. 28). Eisenhower worked closely with Appleby and Jump on the problem of coordinating the work of agencies with interrelated responsibilities concerned with land use.

Eisenhower also worked with Assistant Secretary Wilson, who was appointed Chairman of the Land Policy Committee established in the Office of the Secretary on March 29, 1935 (306, no. 667).

Representatives of 10 agencies were designated as members of the Committee. The Committee was given responsibility for "passing on" all projects concerned with (1) land acquisition, (2) administration of public lands under jurisdiction of the Department, and (3) regulations and cooperative arrangements affecting the administration of private lands. It was also responsible for reviewing all existing policies and working arrangements. The decisions of the Committee, subject to the approval of the Secretary, were to be final with respect to departmental land policy.

Another step in coordinating land use activities was the appointment of a four-man interbureau committee to study ways in which all branches of the Department of Agriculture could contribute most effectively to the enlarged program of soil conservation. Milton Eisenhower was a member of the committee. Following the report of the four-man committee, three permanent coordinating committees were appointed to maintain cooperative relations between the Soil Conservation Service and other agencies of the Department.¹¹

Regional Adjustment Study

Coordination of activities in Washington had as its objective the coordination of activities in the field where they affected the operations of individual farmers. Here Secretary Wallace, M. L. Wilson, and others stressed the point that programs must not only be coordinated in Washington, but that farmers must participate in planning and carrying them out. An important step in this direction was the organization of a regional adjustment study project by the Agricultural Adjustment Administration in cooperation with other agencies of the Department and the land-grant colleges during the spring of 1935. This study attempted to provide the factual basis for gradually changing the adjustment program from one relying on rigid historical bases to one adapted to national production needs, good farm management, and soil conservation. Following 6 months of intensive study by specialists of the Department and the land-grant colleges, four regional meetings were held during August and September 1935. Secretary Wallace, M. L. Wilson, H. R. Tolley, and F. F. Elliott were among the officials who represented the Department of Agriculture (*14, 1935, pp. 39-46, 105-135*).

Secretary Wallace saw the cooperative study and the regional meetings contributing to the removal of barriers between specialists and between State and National viewpoints. He made the following comments on the regional meetings during the November 1935 sessions of the convention of Land-Grant Colleges and Universities:

At times during the regional meetings I had the feeling that perhaps many of the specialists had worked behind high barriers separating them from other specialists and separating them also from adjoining regions and from a view of the nation as a whole. It became evident, however, that as a result of continued meetings and continued interchange of facts and ideas, integration among these specialists would probably take place very rapidly.

The big thing at these meetings, as the specialists sought for factual reconciliation on national production goals between individual farmer and region and between region and nation, was the conviction that we were building a sound foundation for long-time agricultural adjustment (14, 1935, p. 39).

County Adjustment Planning Committees

The interchange of facts and ideas among representatives and specialists from the Department of Agriculture and the land-grant colleges was not enough for the development of a sound longtime adjustment program. The judgment of representative farmers was needed. Beginning in October 1935, adjustment planning committees of 10 to 20 members were established in cooperation with the extension services of the various States. Secretary Wallace commented as follows on the need for and the function of these county planning committees:

The need for local judgments on these questions has disclosed the lack of effective procedure either for bringing local facts and judgments to the attention of national agencies, or for bringing national facts and judgments of national leaders to the attention of local people. An effective planning agency is needed in each county in order to collaborate with state and national agencies and to serve as a source of information concerning peculiar local requirements. For this reason it is proposed now that outlook and other extension work be so directed as to include not only the focusing of local judgments upon the questions of immediate concern to the Agricultural Adjustment Administration, but also the development in each county of a long-time adjustment program.

... with the inauguration of county agricultural program planning, it is hoped that a "two-way track" will be built to provide the mechanism for the interchange of facts between local and central planning agencies.

It should be distinctly understood that under such an organization the function of the local agency is not that of merely *making recommendation*. It assists the central agencies and other local agencies in formulating national programs. The assistance at one stage in planning work takes the form of making recommendations, but at a later stage it becomes the acceptance or rejection of proposals emanating from the central agency. In short, each local planning agency is an integral part of the whole planning process (14, 1935, pp. 41-42).

Coordination and the Problem of Federal-State Relations

After the Agricultural Adjustment Act of 1933, which Congress had passed "to relieve the existing national emergency," was declared unconstitutional and the Soil Conservation and Domestic Allotment Act was passed "to promote the conservation and profitable use of agricultural land resources by temporary Federal aid to farmers and by providing for a permanent policy of Federal aid to States for such purposes," attention was focused on the problem of coordinating land use programs in Washington and on the relationship of Federal programs and agencies to the land-grant colleges. Before 1933, the nonregulatory work of the Department was channeled to the individual farmer through the extension services of the land-grant colleges under a 1914 memorandum of agreement. The Agricultural Adjustment Administration and the Soil Conservation Service established direct channels which reached the individual farmers. By 1936, both agencies were responsible for carrying out conservation programs which were no longer considered temporary or emergency in character; the Agricultural Adjustment Administration was in about 2,500 counties and the Soil Conservation Service was then working only in projects and Civilian Conservation Corps camps in about 350 counties. Moreover, the administration of the agricultural conservation program was presumably to be changed to a grant-in-aid basis.

State extension service directors and other land-grant college officials became concerned over the direct administration of soil conservation programs from Washington and over possible duplication and overlapping between the programs. The subject came up for intensive discussion at the annual meeting of the Land-Grant College Association in November 1936. Three committees of the Association—Land Problems, Extension Organization and Policy, and Executive Committees—discussed the problem. The committees urged upon the Association that "every effort be made to make fully effective the principles of association and cooperation set forth" in the fundamental agreement of 1914. The chairman of the Association Committee on Land Problems, in a speech entitled "Some Obstacles to Conservation," made the following indictment of the administration of land conservation activities:

There is widespread confusion among public agencies in the administration of land conservation activities. There is confusion between the Federal Government and the states, among different federal departments, among different bureaus within a single federal department, and among different agencies within a single state. . . . But regardless of its explanation, the confusion is an important obstacle. It discredits the American's boasted genius for organization. It bewilders and disgusts the landowner. It causes wasteful duplication. It makes the public cynical (*14, 1936, p. 105*).

During the convention, representatives of the Land-Grant College Association met with the Secretary and other representatives of the Department of Agriculture. An agreement was reached to give the problem of Federal-State relationships, as affected by the new policies and programs, "full, unhurried, and careful examination" (14, 1936, p. 90).

Following discussions at the Land-Grant College convention, Secretary Wallace appointed two committees on December 3, 1936 (306, nos. 701, 702). Both were headed by Assistant Secretary Wilson and both had Milton Eisenhower as one of the members.

Membership of the Departmental Committee on Problem of Federal-State Relations in Agricultural Activities was first limited to Wilson and Eisenhower. The Committee was given responsibility for making a comprehensive study and submitting recommendations from the Department's point of view. Joint meetings were to be held with a committee to be designated by the Association of Land-Grant Colleges and Universities. Membership on the Department Committee was expanded, December 31, 1936, to include the Director of the Federal Extension Service, the Director of Public Roads, the Director of Finance, and a representative of the Agricultural Adjustment Administration, Reuben Brigham, who had recently transferred to that agency from the Federal Extension Service (306, no. 705).

The Committee on Departmental Coordination included, in addition to Assistant Secretary Wilson and Milton Eisenhower, the four Assistants to the Secretary concerned with administration, the Director of Finance, and the Director of Experiment Stations. It also included the heads of the following agencies: Forest Service, Bureau of Agricultural Economics, Agricultural Adjustment Administration, and the Bureau of Public Roads.

Coordinator for Southern Great Plains

The Committees on Federal-State Relations and on Departmental Coordination could profit from the experience of committees established to work on the special problems of the Great Plains, the Nation's Dust Bowl. One of these committees, the Regional Advisory Committee on Land Use Practices in the Southern Great Plains Area, concluded that a special assistant was needed to help coordinate Department programs. On April 20, 1937, it recommended to Secretary Wallace that he "appoint a special assistant with headquarters in the area responsible to him for the coordination of Department programs in the Dust Bowl."¹² The Secretary of Agriculture followed up this recommendation by appointing Roy I. Kimmel as Regional Coordinator for the Southern Great Plains, effective June 2, 1937. Kimmel was a member of the Washington

staff of the Resettlement Administration. He had headed a Washington committee on land use practices in the Southern Great Plains. For a time, this committee had paralleled the Regional Advisory Committee on Land Use Practices in the Southern Great Plains Area.¹³

In a memorandum to Under Secretary Wilson, dated August 20, 1937, Kimmel stated that the Office of the Coordinator for the Southern Great Plains could not be effective unless it was

. . . in a position to say definitely what the policies of the Department are. . . . Integration of the Department programs in the field will be virtually impossible unless objectives can be definitely articulated.

Office of Land Use Coordination

In the meantime, Secretary Wallace and agency heads had come to the conclusion that the Department could not rely upon inter-bureau committees as a major device for coordinating the land use activities of Department agencies. With the addition of new programs and the transfer of additional agencies to the Department, more than 300 interbureau committees were established to bring about coordination during the period 1933 to 1938 (283, 1939, p. 88).

During May 1937, the land use agencies, which included the Agricultural Adjustment Administration, the Soil Conservation Service, the Forest Service, the Bureau of Biological Survey, the Federal Extension Service, the Bureau of Chemistry and Soils, and the Farm Security Administration, held a series of evening conferences "to determine the most efficient and inexpensive way of providing for coordination" of their "closely related and inter-dependent activities." The agencies recommended that a central office for the coordination of land use planning be established as a part of the Office of the Secretary and agreed to cooperate by providing funds and personnel for the office.

Milton Eisenhower was designated as Coordinator of Land Use Planning on July 12, 1937, and assigned the following duties and functions: (1) Represent the Secretary in the coordination and, when necessary, the stimulation of land use planning work of the Department; (2) clear and coordinate land purchase activities; (3) allocate flood control funds; (4) review and coordinate all survey work; (5) "strive to coordinate survey and land use planning work of the Department with that of State agencies"; (6) "cooperate with Chiefs of Bureaus in coordinating land use research, and such research with the survey and planning work"; (7) cooperate with heads of action agencies in coordinating basic land use policies and programs, and cooperate with Department

action agencies, State agencies, and associations of farmers in developing practical land use plans on a county or watershed basis (306, no. 725).

The Coordinator of Land Use Planning was to serve as: (1) Executive Officer of the Land Policy Committee, taking over some functions of the Committee; (2) Chairman of the Flood Control Coordinating Committee; (3) representative of the Department on all committees of the National Resources Committee, or its successor, the National Resources Planning Board, concerned with land use planning; and (4) member of the Secretary's Coordinating Committee.

The Office of Land Use Coordination was established as a permanent part of the Office of the Secretary during 1938 (86, p. 155; 306, no. 786). Ernst H. Wiecking had been designated Assistant Coordinator of Land Use Planning and directed to "give special attention to the professional and technical aspects of land use coordination," on August 12, 1937 (306, no. 729). Wiecking served as Chairman of the Water Facilities Board until September 1939, when G. R. Phillips of the Office of Land Use Coordination became Chairman. The Board, established in accordance with a July 1, 1938, policy statement on water facilities, was given responsibility for promoting cooperative activity of the Bureau of Agricultural Economics, the Soil Conservation Service, and the Farm Security Administration. A representative of the Office of Land Use Coordination served as Chairman of the Board. Responsibility for coordination, taking "particular pains to provide for coordination between the Agricultural Conservation and Water Facilities Programs," was assigned to the new Board.¹⁴

The Land Use Coordinator and the Chief of the Forest Service served on an interdepartmental committee with representatives of the Department of the Interior to secure clearance of statements and administrative orders before they were issued by either department. By working out agreements on an interpersonal basis between officials responsible for program development, the committee was able to prevent public disagreements between members of the President's Cabinet.¹⁵

Mount Weather Agreement

The Committee on Extension Organization and Policy of the Land-Grant College Association, reflecting the views of many State extension services, had expressed concern at the 1937 convention of the land-grant colleges over the relationship of State extension services to the Agricultural Adjustment Administration and other Federal agencies.

The committee wanted to be assured that future adjustment legislation or a memorandum of agreement insure that "the Land-Grant College be designated as the sole agency for leadership in research and extension education in all so-called action or other programs dealing with individual farmers. . . ." The executive body of the Land-Grant College Association voted that this recommendation be referred to the Committee on Relationships and the Executive Committee "with power to act" (14, 1937, pp. 247-259).

At the 1937 meeting of the Land-Grant College Association, Bushrod W. Allin, of the Program Planning Staff of the Agricultural Adjustment Administration, discussed the concept of planning which was to serve as the basis for the Mount Weather Agreement between the colleges and the Department. Allin stated that sound agricultural planning required three essential elements:

First, it must provide for governmental or group action where such is needed for achieving the goals established. Major farm problems no longer can be treated adequately by leaving the individual farmer to his own resources. . . . A second essential of sound agricultural planning is that it be the outcome of joint efforts of farmers and experts. . . . The third requisite of sound agricultural planning is proper coordination of its related parts. Various agencies dealing with land use must avoid working at cross purposes. County planning should not be merely an adjunct of the Agricultural Adjustment Administration, but should be related also to the activities of other agencies dealing with the agricultural problem. In the States, county planning should head up in the Land-Grant Colleges. Finally, if interest in planning is to be maintained, those participating must be satisfied that the results of their activity actually have some bearing upon action programs (14, 1937, pp. 129-130).

The Special Committee on Relationships of the Land-Grant College Association and the Department's Committee on Federal-State Relations continued to give intensive study to the problem. By July 4, 1938, the Department's committee had prepared a draft of a memorandum of agreement to relate the State land-grant college programs to the action programs of the Department of Agriculture (14, 1938, p. 285).

Committees of the Land-Grant College Association and other representatives of the colleges met in Washington on July 4, 5, and 6, 1938, to discuss the proposed agreement submitted by the Department of Agriculture. This meeting was followed on July 7 and 8 by a joint meeting between representatives of the land-grant colleges and the Department of Agriculture at Mount Weather, Va. At this meeting, the draft agreement which had been prepared in the Department was "shortened and clarified" (14, 1938, p. 285). The Mount Weather agreement was approved by the executive committee of the Land-Grant College Association on July 8, 1938. It provided that the Department was to continue administering action programs from Washington, but was to cooperate with the colleges in jointly setting up State and county land use planning committees in all States and agricultural counties. Under this agreement, the State extension services were to take the initiative in setting

up county land use planning committees as subcommittees of their county agricultural program building committees. These committees were to be composed of at least 10 farmers; of the representatives of the various action agencies in the county; and of the county agents, who could serve as executive officer or secretary. These county land use planning committees were to correlate the plans of community land use planning committees. On the State level, the State director of extension was to serve as chairman on a land use planning committee composed of representatives of the various action agencies and of a number of farm people.

The following four objectives to be reached by setting up this land use planning organization were defined in the Secretary's *Annual Report* for 1939:

(1) Democratic participation of farm men and women in the planning of action programs, (2) adaptation of national policies and programs to varying local conditions and to local problems, (3) coordination of the many bureau and division activities into one broad comprehensive program, and (4) coordination of Federal, State, county, and local action on agricultural problems (304, 1939, p. 75).

Milton Eisenhower, in a discussion entitled "Who Should Be Responsible in the Development of an Agricultural Planning Program?" before the 1938 convention of the Land-Grant College Association, gave the following explanation of the background of and the Department's expectations with respect to the agreement:

Now, the fact that an agreement seemed necessary indicates of itself that there was a problem of some importance requiring solution. The problem centered upon the management of the instruments and methods set up by government to deal quickly and vigorously with a new situation.

The Congress began only a few years ago to spell out new policies in a whole series of enactments. . . . In five years, more than a dozen major and minor agricultural laws were passed. Grouped together, they directed the Department of Agriculture to put forth enormous efforts in new ways.

Most of the programs involved in this new comprehensive policy required planning and action by farm people. They also required cooperative action by Federal, State, and local agencies. But the cooperative action was of a new kind. It departed from the traditional relationship of the grant-in-aid type that had existed between the Colleges and the Department in research and extension work. In framing the new laws the Congress, seeking to bring about simultaneous nation-wide action, placed on the Secretary of Agriculture the responsibility for their administration. . . .

Prior to 1933, the work of the Department . . . had been channeled to the farmers of a county through one man, the county agricultural extension agent. Then, when responsibilities multiplied, new administrative lines came to the county and to the individual farmers.

It was inevitable that some difficulties should arise. . . .

In planning for programs tackling different segments of the whole farm problem we must have a common denominator. This common denominator, it seems to me, is land-use.

Further, planning by a technical agency or by administrators is of little avail, unless such planning is understood and accepted by farmers. So if we wish to avoid two compartmentalized sets of

planning—one by farmers and one by specialists—with each compartment insulated from reality, if we wish to have farmers and administrators view the same set of facts, arrive at common interpretations, formulate common objectives, and join in working toward these objectives, it seems essential, then, that the county committee be constituted as agreed to at Mount Weather. Farmers need the help that specialists can provide, and specialists must be guided by the experience of farmers. . . .

We in the Department realize, I think, that the problems of our times transcend the authority and wisdom of any particular agency. Nevertheless, responsibilities have been placed upon us which we cannot and, I'm sure, do not wish to escape. To meet them the Land-Grant Colleges and the Department have dared to mark off a new course in the field of agricultural planning. . . .

In the evolution of agricultural planning, I venture the assertion that the Mount Weather agreement is destined to become recognized more and more as a significant milepost. It stands as a tribute to the kindness, tolerance, and thoughtful guidance of Dean Ladd and M. L. Wilson. It represents a remarkable compromise in points of view. It can be criticized, no doubt, as departing at some points from the ideal, but it provides a good basis for approaching the ideal. It is more than a start in providing democratic methods and machinery for planning in a democracy (14, 1938, pp. 118-122).

1938 Reorganization of the Department

The Mount Weather agreement paved the way for a general reorganization of the Department of Agriculture, announced October 6, 1938, to become effective October 16, 1938¹⁶ (306, nos. 782, 783, 785, 786).

Secretary Wallace testified that the objective of the October 1938 reorganization was to insure that the Department's programs were coordinated when they reached the farm. To achieve this coordination, "all action administration was to be grouped around a single core of program planning" and a cooperative system of program planning was to be organized to insure coordination of programs in the field (283, 1940, p. 24). The Bureau of Agricultural Economics was reconstituted as the central program-planning agency for the Department. Its economic research function was retained, but responsibility for marketing and regulatory work was transferred to other agencies. Responsibility for the Program Planning Division of the Agricultural Adjustment Administration was assigned to the Chief of the Bureau of Agricultural Economics. Program-planning functions in other areas and of other agencies were also added to his responsibilities. The Chief of the Bureau of Agricultural Economics was thus given the dual responsibility for the integration of the general planning and program-forming activities of the Department and for devising methods of integrating these plans with those of State and local

planning committees as a guide for action programs of the Department.

Under Secretary Wilson, in an address at the 1938 convention of the Land-Grant College Association, explained the need to reorganize the Department to group all action administration around a central core of program planning:

I think all of you will agree that prior to 1933, the Department was a well organized, efficient institution for doing the job then assigned to it. Then, during the next five years, new agencies were added and old ones were expanded. But the type of organization that had proved useful before was not necessarily the best for the new task of managing nation-wide action programs.

For research and educational activities it is possible to have bureaus with clearly defined functions and without one bureau duplicating the work of another. But in the administration of action programs—each of which is designed to deal with a given segment of a common problem—the greatest single fact is their interdependence. . . .

This interdependence of the action programs clearly called for new structures and procedures to guarantee that all programs are essentially one program when they reach the farm. To achieve this, two things seemed necessary: First, reorganization of the Department that would group all action-administration around a central core of program planning; second, a cooperative relationship of program planning within the Department to that of community, county, state and regional groups. . . .

I have purposely saved for this point in any discussion the reconstituted Bureau of Agricultural Economics. It, you will see from what I have already said, is the heart of the new Department structure.

We have found from experience—as I am sure you have in your work—that effective coordination of programs must start deep down in the fact finding and planning processes. If there is disorganization in planning, if separate programs operate in the light of general plans that conflict, then there can never be harmony in administration. . . .

Prior to the reorganization, each action agency in the Department engaged in both general and detailed planning. There was constant danger, of course, that the judgments formed in connection with one program would be at variance with those formed in connection with another. Now, all general planning is consolidated in a single agency—though, of course, each will continue to carry on detailed operations planning. Stated abstractly, the new Bureau of Agricultural Economics, under the leadership of H. R. Tolley, aided by the experience of farmers themselves and cooperating with other Federal agencies and the Land-Grant Institutions—will establish the general framework for action; the detailed planning and operations of each agency will then be carried on within that framework (*14, 1938, p. 84*).

Program Board

The general planning work under the leadership of the Bureau of Agricultural Economics had to be reviewed and evaluated in

relationship to overall policy and program developments in the Department. An Agricultural Program Board was established in the Office of the Secretary as a part of the October 1938 reorganization. The Board included in its membership the Chief of the Bureau of Agricultural Economics, the heads of the major action agencies, the newly appointed Director of Marketing and Regulatory Work, the Director of Research, the Solicitor, the Director of Finance, and Paul H. Appleby of the Secretary's immediate office. The Coordinator of the Office of Land Use Coordination served in the dual position of Chairman and Executive Officer of the Agricultural Program Board. The Program Board, stated Under Secretary Wilson: "effectively completes the chain from planning, to over-all review for administrative feasibility, to actual administration, and to continuing administrative coordination" (14, 1938, p. 75).

Establishment of the Bureau of Agricultural Economics as the general planning agency of the Department necessitated a redefinition of the functions of the Office of Land Use Coordination to distinguish between coordination and general planning. Secretary's Memorandum 814 of April 6, 1939, stated that the Office of Land Use Coordination was to "represent the Secretary in effecting administrative coordination within the Department of all land-use activities." This "administrative coordination" was popularly referred to as "operational planning" to distinguish it from the general planning function of the Bureau of Agricultural Economics.

The redefinition of functions gave the Office of Land Use Coordination a more general assignment with respect to interdepartmental relationships. It was to represent the Secretary "in effecting, and in providing continuity for, coordination between the land-use programs of the Department and the work of other Departments and agencies of the Federal Government." The 1937 memorandum had assigned it responsibility for representing the Secretary on all committees of the National Resources Committee, and successor agencies, concerned with land use planning.

The April 6, 1939, memorandum directed the Office of Land Use Coordination to make a "continuous study of departmental organization, administration, and procedure in the land use field, with a view to achieving maximum coordination of operations within the Department, interdepartmentally, and with relation to the States." It was also given responsibility for making "a continuous study, from the point of view of administrative policy and procedure, of Federal and pertinent State legislation relating to land use activities."

The regional coordinators for the Southern Great Plains and the Northern Great Plains were designated as staff members of the Office of Land Use Coordination by the April 1939 memorandum. The Coordinator for the Northern Great Plains had been appointed during December 1938, effective January 1, 1939.¹⁷

Consolidation of Marketing Work Begun in 1938

Major attention was focused on the coordination of land use activities of the Department by the 1938 reorganization, but measures were also taken to coordinate and to begin the consolidation of marketing activities which had been scattered among seven different agencies of the Department. The Marketing and Marketing Agreements Division and the administration of surplus diversion activities of the Agricultural Adjustment Administration were removed from the jurisdiction of the Administrator of the Agricultural Adjustment Administration by the appointment of the President of the Federal Surplus Commodities Corporation, Jesse W. Tapp, to the position of Associate Administrator of the Agricultural Adjustment Administration in charge of this work, and by the further provision that the President of the Corporation was to report directly to the Secretary of Agriculture. The Federal Surplus Commodities Corporation was raised to bureau status. Formal consolidation of the organizational units had to await legal authorization. This authorization was provided by the Reorganization Act of April 3, 1939.¹⁸ The Surplus Marketing Administration was established under authority of the President's Reorganization Plan No. III, effective June 30, 1940. While the Federal Surplus Commodities Corporation remained a corporate entity, its functions, personnel, and funds were transferred to the new Surplus Marketing Administration (306, no. 871).

The reorganization of October 1938 removed the responsibility for the administration of the Sugar Act of 1937 from the Agricultural Adjustment Administration, establishing the Sugar Administration as an independent agency with bureau status. Joshua Bernhardt was designated Administrator. Responsibility for administration of the sugar program was transferred back to the Agricultural Adjustment Administration, effective February 1, 1940 (306, no. 849).

Removal of responsibility for the administration of the Sugar Act, disposal of surplus commodities, and marketing and marketing agreement work by the 1938 reorganization order had as one of its objectives a clearer delineation of the functions of the Agricultural Adjustment Administration, as well as a better coordination of marketing activities. Transfer of responsibility for marketing activities from the Administration reduced the size and functions of the largest and most powerful of the Department's agencies, making it easier for the Secretary to coordinate its work with that of the smaller agencies. The appointment of R. M. Evans, who had been serving as an Administrative Assistant to the Secretary, to the position of Administrator of the Agricultural Adjustment Administration also contributed to making the Administration more responsive to changes in the overall policy objectives of the Department. In the Secretary's Office, Evans had assisted the Secretary in his responsibility for coordinating the activities

of the Agricultural Adjustment Administration with those of other agencies.¹⁹ The former Administrator, Howard R. Tolley, became Chief of the reconstituted Bureau of Agricultural Economics.

C. W. Kitchen, as personal representative of the Secretary, was given a number of responsibilities. These were marketing and regulatory activities, including the activities of the Division of Crop and Livestock Estimates, removed from the Bureau of Agricultural Economics by the October 1938 reorganization; the Packers and Stockyards Act, then being administered by the Bureau of Animal Industry; the Federal Seed Act, then being administered by the Bureau of Plant Industry; and the Dairy Products Export Act, then being administered by the Bureau of Dairy Industry. Formal consolidation of the work had to be deferred until legislative authorization became available. The organizational units concerned with this marketing, regulatory, and service work were formally consolidated into a new agency, the Agricultural Marketing Service, on July 7, 1939, under authority of the Department of Agriculture Appropriation Act of 1940 (*306, no. 830*). Kitchen was designated Chief of the Agricultural Marketing Service.

The October 1938 reorganization established the position of Director of Marketing and Regulatory Work to coordinate and unify the five fields of marketing activities. These were disposal of surplus commodities; marketing agreements and orders; commodity exchanges; sugar; and marketing research, service, and regulatory work. A. G. Black was appointed to the new position. Black had been serving as Chief of the Bureau of Agricultural Economics since November 18, 1936. He remained in the position of Director of Marketing and Regulatory Work until December 27, 1939, when his appointment as First Deputy Governor of the Farm Credit Administration became effective.²⁰ When Black transferred to the Farm Credit Administration, the personnel and functions of the Office of the Director of Marketing and Regulatory Work were transferred to Milo Perkins as personal representative of the Secretary. Perkins was designated Director of Marketing, while retaining the positions of President of the Federal Surplus Commodities Corporation and Associate Administrator of the Agricultural Adjustment Administration in charge of the Division of Marketing and Marketing Agreements (*306, no. 849*). He had succeeded Jesse Tapp in the latter positions in January 1939 (*312, no. 1220-39*).

As Director of Marketing, Perkins was assigned responsibility for coordinating the "marketing, distribution and regulatory work of the agencies and general programs of the Department, inter-departmentally and in relation to State governments and their agencies." Effective February 1, 1940, the Consumers' Counsel Division was to be under the general supervision and direction of the Director of Marketing, while it remained nominally as an organizational unit of the Agricultural Adjustment Administration

(306, nos. 849, 988). Perkins' previous experience as an Assistant in the immediate Office of the Secretary had given him an opportunity to understand from the Secretary's point of view the need for coordination of Department activities in the light of the overall goals of the Department.

The October 1938 reorganization made several important changes in the administration of the physical land use programs. The objective of these changes—as explained in Secretary's Memorandum 785—was to consolidate in one agency, the Soil Conservation Service, all erosion control, flood control, and related activities which involved physical work on individual farms, watersheds, and other areas. The Soil Conservation Service was given responsibility for administering the action phase of the land utilization program (including retirement and development of submarginal land) and of the farm forestry program. The objective of these transfers of responsibility was to make it possible for the farmer to work with a single representative of five closely related land use programs.

Coordination of Department programs in Washington was essential to avoid confusion and conflict when they reached down to individual counties and farmers. Coordination was also essential to facilitate cooperative relations between the Department of Agriculture and other agencies of the Federal Government. The Office of Land Use Coordination and the use of formal committees and informal task groups had proved helpful in bringing about cooperative relations with the Department of the Interior. This Department was concerned with many problems affecting the land and thus directly or indirectly was affecting the operations of individual farmers.

Presidential Reorganizations Affecting the Department

The President's Committee on Administrative Management, known as the Brownlow Committee, gave special attention to these problems in its study of Governmental organization (38, pp. 330–355).

Recommendations resulting from its 1937 report that the Congress give the President broad authority to reorganize and realine Government agencies by Executive orders, effective unless they were vetoed by both Houses of Congress within 60 days, were not accepted in 1937. The ideas were revived in 1939 by the enactment of the Reorganization Act of 1939, which gave the President authority to transfer and consolidate agencies.²¹

Under Reorganization Plan No. II of May 9, 1939, the Bureau of Biological Survey was transferred from the Department of

Agriculture to the Department of the Interior. The transfer became effective July 1, 1939.²²

Other transfers from the Department of Agriculture by the President during 1939 and 1940 included the Bureau of Public Roads, to the Federal Works Agency, effective July 1, 1939;²³ the Food and Drug Administration except for administration of the Insecticide Act of 1910, to the Federal Security Agency, effective June 30, 1940; the Weather Bureau, to the Department of Commerce, effective June 30, 1940; and "the functions of the Secretary of Agriculture with respect to the Foreign Agricultural Service (other than functions with respect to such services pertaining to activities in the United States and to the compilation, publication, and dissemination of information)," to the Secretary of State, effective July 1, 1939.²⁴

Foreign Agricultural Service

When, in 1930, the Foreign Agricultural Service Act was passed, the administration of the new act was placed under a new division of the Bureau of Agricultural Economics. The first leader of the new division was Asher Hobson. He was succeeded by Leslie Wheeler. Following the reorganization of October 1938, which reconstituted the Bureau of Agricultural Economics as the central planning agency for the Department, the Division of Foreign Agricultural Service was established as a staff office of the Secretary, effective December 1, 1938. Wheeler became Chief of the Foreign Agricultural Service at that time.

The transfer of the Foreign Agricultural Service to the Office of the Secretary was made by an unnumbered Secretary's memorandum, issued November 30, 1938. Its functions were defined in Secretary's Memorandum 804, January 28, 1939. The Foreign Agricultural Service was directed to cooperate closely with the Bureau of Agricultural Economics. The Bureau was to continue to have primary responsibility "for the preparation and dissemination of analytical reports on the world situation and outlook, including domestic and foreign factors." The Foreign Agricultural Service was given the assignment to

. . . coordinate the relations of the Department of Agriculture in respect to foreign trade and allied problems and policies with the Department of State and other Departments and agencies of the Government and with foreign governments and private agencies either through the Department of State or direct.

The Chief of the Foreign Agricultural Service was designated Liaison Officer of the Department with the Department of State. All correspondence prepared in the Department for the Secretary's signature to the Department of State and all letters to Members

of Congress concerning foreign trade policy were to be routed through the Foreign Agricultural Service. The memorandum also established a Department Committee on Foreign Relations consisting of the Director of Marketing and Regulatory Work, the Chief of the Foreign Agricultural Service, and Donald Blaisdell, at that time Assistant to the Under Secretary. The Committee was given responsibility for considering questions involving foreign trade or allied policies called to its attention by the Secretary or by the Chief of the Foreign Agricultural Service. The Committee was directed to make appropriate recommendations to the Secretary.

Office of Foreign Agricultural Relations

When the Reorganization Act of 1939, approved April 3, 1939, was passed, work started immediately, under the leadership of the Budget Bureau, to find areas within the executive branch to which its powers might properly be applied. One of these pertained to the Foreign Service. The establishment of the Foreign Commerce Service, under legislation passed on March 3, 1927, and of the Foreign Agricultural Service, under legislation approved on June 5, 1930, had resulted in three departments having authority for work in foreign countries. It was felt by those considering reorganization of the executive branch that this was an undesirable situation, that it was leading to a duplication of work and an unnecessary increase in expenditures, and that steps should be taken under the authority of the new act to bring about a consolidation of the three Services into one—the Foreign Service of the United States. In fact, discussions between the departments had been going on for some months, looking toward this end, before the Reorganization Act of 1939 was actually passed.

The primary objective of the consolidation was to bring the Foreign Commerce Service into the Foreign Service under the Department of State. It was considered that economics and politics went hand in hand and that both should be handled under one authority—the Ambassador of the United States. It was also felt that the earlier approach of “trade promotion” was less pertinent than other considerations brought on by increasing world tensions. On the other hand, the Foreign Agricultural Service was very small, its work was somewhat more specialized, and most of the seven foreign offices existing at the time of the consolidation covered geographic regions rather than individual countries. Nevertheless it was felt that, in the interest of consistency, it too should be brought into a unified Foreign Service.²⁵

This was accomplished by Reorganization Plan No. II, which provided for the transfer of the commercial attachés and the agri-

cultural attachés, together with their local staffs, into the united Foreign Service. It did not, however, affect Washington personnel in the Department of Commerce or its regional offices in the United States. Nor did it affect that part of the Foreign Agricultural Service in Washington or the commodity specialists who worked alternately in Washington and abroad.

The Foreign Agricultural Service had an appropriation of about \$300,000 at the time of the transfer. Of this, a little less than \$100,000 was transferred to the Department of State. Thus two-thirds of the appropriation, plus some transferred funds (chiefly from the Department of State for work in Latin America), was available to the Department of Agriculture to establish a new "foreign office" in the Department.

The Office of Foreign Agricultural Relations was, therefore, established by authority of Secretary's Memorandum 825, dated June 30, 1939. This Office, too, was a part of the Office of the Secretary. Leslie Wheeler continued in charge, with the designation of Director of Foreign Agricultural Relations. The personnel and functions not transferred to the Department of State were transferred to the Office of Foreign Agricultural Relations which, according to the memorandum, was to have the following functions:

- (a) To collect information on foreign agricultural production, foreign markets, foreign trade, and related matters through the Foreign Service of the United States, the International Institute of Agriculture and other appropriate sources and to disseminate such information to all branches of the Department interested and to the public.

- (b) To maintain liaison with the Department of State with a view to assuring prompt and adequate reports from the Foreign Service of the United States on foreign developments of interest to the various branches of the Department of Agriculture, and to American agriculture generally.

- (c) To conduct specialized research and investigational work on foreign demand for American agricultural products, including such related subjects as the trends and potentialities of competitive foreign agricultural production, the nature and tendencies of foreign government policies affecting agricultural production and consumption, and general economic and financial conditions in foreign countries as they affect the demand for agricultural products.

- (d) To direct and coordinate the participation on the part of the Department of Agriculture in the reciprocal trade agreements program.

- (e) To plan, direct and coordinate the participation by the Department of Agriculture in the general program of cooperation between the Government of the United States and the governments of the other American Republics under the terms of Acts of Congress, authorizing such cooperation.

In addition to the above, the memorandum of June 1939 directed the Director of Foreign Agricultural Relations, in a staff relationship to the Secretary, to coordinate—

. . . the relations of the Department of Agriculture in respect to foreign trade and allied problems and policies with the Department of State and other departments and agencies of the Government

and private agencies either through the Department of State or direct. . . .

Leslie Wheeler has the following to say about the new office and its functions:

Actually this memorandum gave the new Office specific authority to do what its predecessors, the Division of Foreign Agricultural Service of the Bureau of Agricultural Economics and the Foreign Agricultural Service, had been trying, with some difficulty, to do for some time. The Office was both staff and line. It had its own substantive work to do as well as a "staff relationship" to the Secretary.²⁶

Departmental Coordination Through Staff Offices

The establishment of new staff offices and widening the scope of others included a number of changes. These included assigning responsibility for legal work of the new agencies to the Office of the Solicitor, effective April 1, 1935 (*306, no. 666*); assigning general oversight over all library work in the Department to the Department Librarian, effective February 25, 1939 (*306, no. 808*); assigning responsibility for coordinating the informational work of all agencies in the Department to the Director of Information, effective October 16, 1938 (*306, no. 787*); establishing the Office of Plant and Operations as a successor agency to the Division of Operations on March 1, 1939, with responsibility for the efficient housing of departmental activities (*306, no. 809*); and establishing an Office of CCC [Civilian Conservation Corps] Activities, effective July 27, 1938 (*306, no. 769*). In a sense, the designation of a Director of Research on March 16, 1936, and the appointment of the Director of Marketing and Regulatory Work in 1938, were steps in coordinating departmental activities. The Director of Research is discussed in the preceding chapter, and the Director of Marketing and Regulatory Work elsewhere in this chapter.

In line with the development of a stronger administrative organization of the Department, the Forest Service during 1936 appointed eight Assistant Chiefs to handle better its enormously increased activities. The number of divisions was increased from 8 to 23; all but one of them, the Division of Fiscal Control, were correlated in 6 groups. Functionalization of the staffwork was effected through delegation of authority to certain of the staff officers to act for the Chief in the task of general supervision and direction of the diversified activities of the Forest Service.

Establishment of the Office of CCC Activities as a unit in the Office of the Secretary, effective July 27, 1938, was another im-

portant organizational step taken to integrate Department programs before they reached the field (306, no. 769). The Chief of the new Office, Fred Morrell, was assigned the following responsibilities: Coordination of activities carried on by the Civilian Conservation Corps for the various agencies of the Department, including the conservation activities carried out for the Forest Service and the Soil Conservation Service; overseeing CCC matters pertaining to finance, budget, equipment, personnel, and location of the camps; responsibility for the coordination and integration of CCC activities with other programs of the Department; making regular and special reports; and, in general, handling "all CCC matters for the Department which do not require the attention of the Secretary."

The Civilian Conservation Corps made a major contribution to the soil conservation and forestry programs of the Department. Its contribution to the soil conservation activities has been discussed in an earlier chapter.

The Corps could make an immediate contribution to improving National Forests, State forests, and private forest lands because Federal and State forestry agencies had drawn up comprehensive plans for conservation work before the Corps was established in 1933. It has been estimated that in the 9 years of its operation, the Civilian Conservation Corps performed 730,000 man-years of work, valued at perhaps \$876 million and increased Federal forests by 7,725,000 acres. This conservation labor force restored forests and prevented further loss of valuable forest resources. A regional forester from Pennsylvania said: "It has been a byword among conservationists that the Civilian Conservation Corps had enabled foresters to advance their conservation programs by the equivalent of twenty years of improvement work" (267, p. 47; 337, 1942, pp. 22-23).

Establishment of an Administrative Council on February 12, 1940, as a successor to the Departmental Coordinating Committee, provided an organization "to improve the efficiency of the Department as a dynamic administrative agency." Paul H. Appleby, Assistant to the Secretary, served as Chairman. The other members were the Directors of Finance, Personnel, Research, Information, and Marketing; the Land Use Coordinator; and the Solicitor.

Effects of the Department's Experience

In an address on December 28, 1939, before a joint session of the American Political Science Association and the Society for Public Administration, Secretary Wallace stated:

The very essence of being a good executive is to pick men of integrity who understand your policy objective. The poorest executives are

those who dip too much into details. Failing to see the woods for the trees, they get hopelessly lost, trying to do work which could be done better by someone else. The strength of top executives should be saved for the really important policy questions. . . .

We have learned a lot in the last seven years about administration . . . the President's "Committee on Administrative Management" presented a report which will no doubt be a landmark in the history of administrative reorganization. . . . Now we are carrying out some of the recommendations of that report (312, no. 1162-40).

In another assessment of the effects of and lessons learned from the Department's experiences in administration during the 1930's, Paul H. Appleby wrote:

The Department was big. When the President's Committee on Administrative Management, headed by Louis Brownlow, began its studies looking toward reorganization, some of its staff people, so I was told, had an initial impulse to reduce the size of large departments. But, they found on examination that if there was any fact of quality related to size of agency, it was that the larger agencies were better administered. It was hinted that Agriculture was the convincing exhibit.

I used to talk about the concept of structure in the shorthand term of "balance of power." This meant that, as Chester Barnard put it, each executive on a given level of an organization should be as nearly as possible equal in power and function to all other executives on that level of that hierarchy.

Each staff office, that is, each office within the general Office of the Secretary, was capable of providing an element of coordination. While some of these offices were old and some of the functions were not new, as a whole the staff offices made possible a degree of integration and harmony in response to the Secretary's responsibility that was not approached anywhere else at that time. Similarly, the structure of the bureaus, administrations, and services operating programs reflected the same basic aim. As in all large organizations, some of the changes were influenced by a search for forms best suited to the special abilities of dynamic personalities. Some reflected special professional drives, or special citizen interest groups, but in a larger way the new Department reflected pursuit of an administrative structure that would help identify and make manageable differences in viewpoints and functions. The overriding concern was to put the Secretary in a position where he could be responsible for his Department, thus enabling the President to be responsible for this segment of the executive branch, and upholding the responsibility of Congress. Thus the chain of responsibility serves the general public.²⁷

¹ Letter, Mordecai Ezekiel to Rexford G. Tugwell, Oct. 20, 1939, Secretary's Files, National Archives.

² Memorandum, Henry A. Wallace to Nils A. Olsen, Mar. 6, 1933, Secretary's Records, USDA, National Archives.

³ Interview with Paul H. Appleby, Dec. 3, 1961.

⁴ Discussion with Henry A. Wallace, Jan. 13, 1962.

⁵ Interview with Louis Brownlow, Jan. 16, 1962.

⁶ 48 Stat. 467.

⁷ Letter, R. G. Tugwell to the President, June 22, 1934, Secretary's Records, USDA, National Archives.

⁸ Personnel Records, USDA, Federal Records Center, St. Louis.

⁹ Personnel Records, USDA, Federal Records Center, St. Louis.

¹⁰ Interview with Paul H. Appleby, Jan. 11, 1962.

¹¹ Reports to Henry A. Wallace from Chief of Public Roads, Director of Information, Chief of Forest Service, and Assistant Chief of Bureau of Plant Industry, June 5, 1935 (Processed), Agricultural History Branch Files, USDA.

¹² Regional Advisory Committee on Land Use Practices in the Southern Great Plains Area, Report of the Eleventh Conference, Apr. 19-20, 1937 (Files of the Office of Land Use Coordination).

¹³ U.S. Department of Agriculture, Office of Land Use Coordination, The First Five Years of the Regional Agricultural Council for the Southern Great Plains, Mimeographed, no date, pp. 9, 3-4.

¹⁴ Simons, H. J., An Administrative History of the Water Facilities Program of the U.S. Department of Agriculture to July 1, 1942, Typewritten manuscript, pp. 52-55, 108.

¹⁵ Interview with Paul H. Appleby, Jan. 12, 1962.

¹⁶ Memorandum Describing Departmental Organization, Secretary of Agriculture to Chiefs of Bureaus and Offices, Oct. 6, 1938, copies in Agricultural History Branch Files, USDA.

¹⁷ Coordinator Named for USDA Programs in Northern Great Plains, U.S. Department of Agriculture Press release, Dec. 19, 1938.

¹⁸ 53 Stat. 561.

¹⁹ Discussion with Henry A. Wallace, Jan. 13, 1962.

²⁰ Personnel records of the U.S. Department of Agriculture, Federal Records Center, St. Louis.

²¹ 53 Stat. 561.

²² 53 Stat. 1431.

²³ 53 Stat. 1423.

²⁴ 53 Stat. 1431.

²⁵ Letter, Henry A. Wallace to George S. Messersmith, Apr. 21, 1939; letter, Cordell Hull to Henry A. Wallace, Apr. 21, 1939, copies in Agricultural History Branch files, USDA.

²⁶ Letter, Leslie Wheeler to Gladys L. Baker, Jan. 29, 1962, Agricultural History Branch files, USDA.

²⁷ Memorandum from Paul H. Appleby to Gladys L. Baker, Jan. 16, 1962, Agricultural History Branch files, USDA.

The Department During World War II

The "new" Department of Agriculture was still in its infancy when Hitler sent his panzer divisions against Poland on September 1, 1939, thus catapulting the world into the Second World War. The reorganization of 1938 which was to give the Department its "new" aspect did not become fully effective until July 1, 1939. Furthermore, national elections were only a year away and Henry A. Wallace would soon be nominated as Franklin D. Roosevelt's running mate on the Democratic ticket.

Claude R. Wickard became the 12th Secretary of Agriculture on September 5, 1940. Secretary Wickard was a Hoosier dirt farmer. He graduated from Purdue University in 1915 with a major in animal husbandry and, even before that, began helping to operate the family farm which was settled by his great-grandfather in 1840. In 1932, he had won election to the upper house of the Indiana State Legislature. He earned the respect and admiration of State agricultural leaders as a freshman senator for his sincerity and determination in fighting for constructive and progressive legislation. Hence, he was selected as the Indiana representative on the National Corn-Hog Committee of Twenty-five, the group that helped establish the original corn-hog program of the Agricultural Adjustment Administration. Then at the invitation of A. G. Black, Chief of the Corn-Hog Section of the Agricultural Adjustment Administration, Wickard went to Washington to implement the recommendations of the Committee of Twenty-five, and in 1935, he became Chief of the Corn-Hog Section.

When the Agricultural Adjustment Administration's agricultural conservation program started in 1936, Wickard became first Assistant Director and then Director of the North Central Division. Then on March 1, 1940, he was appointed Under Secretary of Agriculture. In his 6 years as a subordinate in the Department, Wickard proved himself to be a loyal protagonist for the administration's farm program, and a popular spokesman in the Midwest (372, *Aug. 24, Sept. 21, 1940*; 7).

The need for continuity in the administration of the Department in the face of exploding international war, together with the impending election campaign, was a primary factor in his selection as Secretary of Agriculture (12). His appointment met with congressional and public approval.

The Overflowing Granary

The Second World War found America a land of relative abundance. The American people had all of the manufactured goods they could afford to buy, and more food than they could afford to eat at prevailing levels of income and employment. The United States had in storage enough wheat and cotton to supply all its recognized needs for 2 years or more and enough corn to last over a year. Surpluses of these basic commodities were mounting with each succeeding crop. When the European war cut off export trade, large surpluses of other crops began accumulating. The assimilation of apples, citrus fruit, prunes, raisins, and nuts became difficult. World supplies of most foodstuffs were at record levels, and it was felt that the imposition of food rationing in the belligerent countries would reduce consumption, thus contracting markets (312, no. 582-40). On the first day of the war, Secretary Wallace issued a vigorous statement pointing out that after the First World War had been in progress for a year, average prices for agricultural commodities were lower than they had been at the outbreak of the war in 1914 (312, no. 407-40).

American public opinion was opposed to becoming involved, yet there existed a fear that America could not remain aloof if the war lasted long. This underlying fatalistic attitude prompted the surge of speculative buying of agricultural commodities which temporarily shot prices upward (312, no. 587-40). There was panic buying by consumers of certain commodities, such as sugar, which had been in short supply during World War I.

The first concern of the Department of Agriculture was to prevent farmers from jettisoning the farm program in anticipation of boom prices¹ (312, nos. 407-40, 410-40). The Secretary called on Department officials for estimates of the changed situations; as early as the Munich crisis in 1938, the Department took steps to survey its resources in the light of the probable effects of world war (138). After hostilities began in September 1939, the Department officials began exploring all conceivable effects of the war upon agriculture, even the possibility of eventual United States involvement.² James L. McCamy, Assistant to the Secretary, was assigned the task of collecting and appraising information relating to the war.

The first week in September 1939, Secretary of Agriculture Henry A. Wallace invited farm editors, representatives of farm organizations, producers, processors, distributors, and consumer representatives, including organized labor, to meet with him to explore the means of securing cooperation and coordination between groups they represented and the Department of Agriculture. Close cooperative relations with agricultural organizations had usually characterized the development of Department policies and programs. The successful operation of the food stamp program had given trade leaders considerable confidence in the ability of the Secretary of Agriculture and the executives of the agricultural marketing agencies to view sympathetically the interrelationship among the problems of processors, distributors, and producers.

Most of the representatives wanted to avoid establishment of another Food Administration patterned after that of World War I. More than 30 representatives attended this first meeting of the Secretary's Advisory Council. For a time the Advisory Council served effectively as a channel through which the Department kept the producers and food trade groups informed of the probable effects of wartime developments in their spheres of interest (182).

Publicity given to the meetings of the Advisory Council also served as a channel for public information emphasizing agricultural surpluses, the relatively low level of agricultural prices, and the curtailment of exports. The published report of the first meeting stated that "The Department of Agriculture, with the full cooperation of the groups represented by this Council, is the medium through which the efforts of the agencies represented here can be most effective," and that "Whatever is done, must be done through voluntary means without regimentation" (312, nos. 519-40, 1026-40, 1171-40, 1289-40).

But the effectiveness of the Advisory Council was destroyed by the development of serious disagreement among its members on two issues. The first cleavage was between food distribution and farm organization members over a plan proposed by the distribution members for an emergency food organization within the Department of Agriculture. Secretary Wickard referred the problem to a departmental committee with Milo Perkins, Director of Marketing, as Chairman.³ The second difficulty arose when Secretary Wickard presented a plan for supporting the prices of hogs at the April 2, 1941, meeting of the Advisory Council. Some farm organization representatives protested, remembering that during World War I price floors became price ceilings.

The Advisory Council held only one more meeting. The fact of its existence is significant in that, for the first time, representatives of all phases of food industry met and conferred with representatives of farm organizations and spokesmen for consumers as a committee formally organized to advise the Secretary of Agriculture.

The interbureau advisory committee recommended in November

1940 that all Department activities undertaken to meet emergency situations which might arise in food distribution should be coordinated in the Office of the Secretary through the Director of Marketing. Milo Perkins said that—

Scarce foods *could* be rationed, by throwing the Stamp Plan “into reverse,” by prohibiting the purchase of scarce foods with money, and by limiting their purchase to those who had bought “food conservation stamps” in predetermined amounts. . . .

Secretary Wickard passed this suggestion on to Harry Hopkins, special adviser to the President, in a letter dated June 18, 1941. The committee proceeded with the drafting of legislation for possible submission to Congress, giving the Secretary and the marketing agencies of the Department additional powers to regulate, license, ration, purchase, and sell agricultural commodities.⁴ But the report of this committee was not acted upon, and no major changes were made in the organization of the Department between the outbreak of war in Europe and Pearl Harbor.

In the war theater the period from November 1, 1939, to February 1940 was quiet. While France enjoyed false security behind the Maginot line, Britain rushed to build up her defenses and Germany waged a “war of nerves.” Americans began to talk about the “phony war,” and public confidence in the Nation’s ability to remain unentangled grew. If the philosophy of overabundance had been temporarily questioned by agricultural leaders, logic and world events had now reaffirmed and strengthened it. Even when Germany finally started a major offensive and proceeded with incredible speed upon conquest from the Scandinavian countries to the Low Countries and France, and the possibility of a German victory was realized, the effects on American agriculture were envisioned as a further curtailment of foreign markets.

The picture presented at the 1940 outlook conference was gloomy:

It is to be anticipated therefore that . . . the chances are that no considerable restoration of our markets in the belligerent countries will appear as long as the war continues and we remain neutral.⁵

In his annual report for 1940, the Secretary of Agriculture repeated the warning that the farm export situation was not likely to improve and that the world had entered a period of “a new mercantilism, in which foreign trade is increasingly a government monopoly.” The closing of European markets—

. . . sharply warns the American farmer to shift his production more nearly to a domestic basis. . . . Growing unneeded crops is sheer waste of labor, of capital, and of soil, even if temporarily the products can go into storage under Government loans. . . . Farm programs may have to put more emphasis on shifting entire enterprises or systems of farming in certain areas or regions (304, 1940, p. 12).

During the winter of 1940–41, Department administrators stressed these points in their speeches before agricultural organi-

zations. Secretary Wickard, speaking on the "National Farm and Home Hour" on December 31, 1940, enumerated our lost markets for cotton, wheat, tobacco, and other products. Then he declared that—

. . . farmers who produce for the *domestic* market will receive *higher* prices and incomes. . . .

We have our reserves, and we now face the problem of adjusting our production more exactly to our reduced export markets. I'm sure that producers of export crops in 1941 will see the need for shifting part of their land as quickly as possible to other uses (312, no. 1325-41).

Eric Englund, Assistant Chief of the Bureau of Agricultural Economics, spoke on the same subject to the American Society of Agronomy on December 6, 1940. R. M. Evans, Administrator of the Agricultural Adjustment Administration, addressed the annual meeting of the American Farm Bureau Federation on December 9, 1940, and the Farmers Grain Dealers Association of Iowa on January 29, 1940. E. W. Gaumnitz, Assistant Administrator of the Surplus Marketing Administration, spoke at State College Farm and Home Week at Ithaca, N.Y., on February 12, 1941. They all said, in effect, that the United States should learn to live at home and produce for the domestic market. This meant more meat, dairy and poultry products, and fruits and vegetables and less wheat, cotton, and tobacco.

"Guns and Butter Too"

The possibility of a German victory shocked the whole American people. Congress, during the winter of 1940-41, rushed through appropriations of unprecedented size for the national defense. But the production of an adequate supply of food was not regarded as a problem. It was proclaimed that this Nation would have "guns and butter too."

The President announced on May 28, 1940, that he was establishing a National Defense Advisory Commission under authority of a 1916 statute (187, vol. 9, pp. 243-250). Agriculture had been omitted from mention in the organization of the earlier defense agencies, the War Resources Board and the Office of Emergency Management, but one of the seven commissioners on the National Defense Advisory Commission was to represent agriculture, and Chester C. Davis was named to this post.

The functions of the Commission were purely advisory and the Agricultural Division under Commissioner Davis relied on the Department of Agriculture for the major part of its research work. At this time, it was conceived that the chief contribution of the Department of Agriculture and the Agricultural Division

of the National Defense Advisory Commission was to see that the resources of rural America were made available for the defense effort. Some noteworthy contributions were made during this period. The Department of Agriculture was asked to assist in the location of new defense industrial plants, in the acquisition of land for military cantonments, in the training of some of the surplus agricultural labor to take jobs in industry, and in providing emergency seed supplies for some important import commodities such as guayule rubber and castor beans (304, 1940).

Of considerably greater portent for the future was the initiation by the Agricultural Division of the National Defense Advisory Commission of an inventory of farm products and processing and distribution facilities; a study of probable requirements under each of several possible war and defense situations; and an anticipation of possible problems of production, processing, or distribution.⁶ Inevitably this research led to the consideration of possible future Government regulation of food processing and distribution, and the possible eventual establishment of a food administration.

The proliferation of operating wartime agencies from the National Defense Advisory Commission had by the spring of 1941 left the Agricultural Division and the Transportation Division the only remaining functioning sections of the National Defense Advisory Commission. The Office of Production Management, established on January 7, 1941, had merged three of the seven divisions of the National Defense Advisory Commission. The Office of Price Administration and Civilian Supply had been created on April 11, 1941.

The future of the organization and the functions of the Agricultural Division were debated for 2 months, March and April 1941. The question of whether and where a food administration should be established was extensively explored. Commissioner Davis urged the President to establish an office of food supply as a nucleus for a food administration.⁷ The President replied that—

. . . it seems inadvisable just now to risk the alarm that might arise from a broad survey of agricultural supplies and such a survey seems to be unnecessary. For the same reason, I do not think we need to establish an office of food supply or a food administration at this time.⁸

On May 5, 1941, the Agricultural Division was transferred to the Department of Agriculture where it was reconstituted, on May 17, as the Office of Agricultural Defense Relations in the Office of the Secretary with the responsibility of serving as the liaison agency between the Department of Agriculture and the Office of Price Administration and other war agencies (306, no. 905).

Concurrently, the Department of Agriculture was reappraising the probable future market for agricultural commodities, in the light of fast-moving developments in the domestic and international situations. As early as July 1940, Department economists forecast that since the high point in the corn-hog cycle had just been passed,

hog numbers would be decreasing, while at the same time increasing national income would result in improving demand for pork products. Farmers, therefore, could expect better prices for their hogs during ensuing marketing seasons (253). This forecast was repeated more emphatically at the Annual Outlook Conference in October.⁹

Despite these optimistic, though cautious, forecasts, the December report of farmers' intentions showed a substantial reduction in sows bred for spring farrow (302, *Dec. 23, 1940*). Consequently, on December 26, 1940, Secretary Wickard issued a strong statement urging farmers to increase their pork production and cattle marketings. Farmers were assured that prices would be more favorable in coming months than they had been in past months because of increased consumer purchasing power resulting from the defense program (312, *no. 1289-41*). For the first time since 1933 the Department of Agriculture was actively encouraging increased production. Moreover, this announcement came at a time when hog marketings were at an alltime high and prices were at an alltime low.

While it was realized that the British had suffered a heavy blow in their loss of pork, butter, eggs, and cheese supplies from Denmark and the Low Countries, reports from abroad were confusing. The British, for reasons of security, sought to minimize their loss (343, *Apr. 12, 1940*). The Neutrality Act of 1939 and the Johnson Act were still in force. The need of the British to conserve foreign exchange was well known (269, 1941).

By the fall of 1940 the seriousness of the British food situation was revealed. The air blitz was accompanied by a concerted attempt to prevent supplies from reaching England, and the blockade was carried out with effectiveness.¹⁰ By midwinter the British meat ration had been more than halved, and cheese, canned milk, and almost all other foods had been placed on the ration list (343). If the fall of Britain was to be prevented, the United States might have to supply her with butter as well as guns.

While lend-lease legislation was being debated by Congress, the Department of Agriculture Interbureau Committee To Study the Impact of War and the Defense Program on Agriculture reported, on February 17, 1941, that the British would probably not be able to obtain all of the desired agricultural commodities in the quantities needed.¹¹ By March 5, 1941, the Department had received definite requests from the British for \$500 million worth of American farm products, including pork, lard, meats, dairy products, dried beans, and tobacco.¹² Grain surpluses, in a matter of months, could be converted into products desired by the British. Changes in the international situation and the passage of the Lend-Lease Act, March 11, 1941, made it clear that a greatly improved foreign demand situation was in prospect.

Prior to the passage of the Lend-Lease Act, the British, in their negotiating for American agricultural products, had been very

circumspect. Before the outbreak of war, a barter agreement whereby the British took American cotton in exchange for crude rubber had been negotiated. Deliveries under this agreement were carried out by the Commodity Credit Corporation. During the winter of 1939-40 an agreement had been reached with British tobacco merchants whereby the Commodity Credit Corporation purchased tobacco and gave the British an option to buy it at some future date. The Commodity Credit Corporation also subsidized the export of 25 million bushels of corn to the United Kingdom in 1940 (269, 1940, 1941).

Late in February 1940, an Allied Purchasing Commission arrived in Washington and started negotiations with representatives of the Department of Agriculture—the head of the Office of Foreign Agricultural Relations and the head of the Surplus Marketing Administration, the latter also President of the Federal Surplus Commodities Corporation. A member of the British Food Mission stated that by early 1941 the British felt that “The U.S. Department of Agriculture was clearly the BFM’s opposite number. . . .” (185, p. 16).

After April 2, 1941, a small group of officials representing the United States Government met frequently with a small group of British officials. On May 7, 1941, Secretary Wickard announced formal organization of this group as the Joint Anglo-American Food Committee. The committee’s functions were to: (1) Consider how the food resources of the United States could best be used to aid the United Kingdom and allies in maintaining their war effort, and (2) frame general programs of food supply in conformity with procedures of the Office of Lend-Lease Administration (312, no. 2247-41).

The Surplus Marketing Administration, acting through the Federal Surplus Commodities Corporation, had started purchasing cured pork, lard, meats, dairy products, and dried beans in anticipation of lend-lease requirements even before Congress had appropriated funds for lend-lease. This was made possible by an agreement of March 8, 1941, whereby the Commodity Credit Corporation would make funds available to the Federal Surplus Commodities Corporation to purchase foods for the general commodities purchase program. The funds thus made available and the funds from the lend-lease appropriation enabled the Secretary of Agriculture to announce on April 3, 1941, that the prices of pork, butter, and eggs would be supported at well above current market prices (312, no. 1992-41).

The work of formulating a program for the expansion of agricultural production was carried out within the framework of the existing Department organization as set up following the 1938 reorganization. The Bureau of Agricultural Economics had been reconstituted as the general fact-gathering and planning agency for the Department. Liaison with the so-called action agencies of the Department was through the medium of interbureau coordinat-

ing committees appointed by the Secretary and reporting to the Secretary through the Program Board. The membership of the Program Board included the Secretary, the heads of 11 key department agencies, and the Land Use Coordinator.

Between July 9, 1940, and June 6, 1941, the Interbureau Committee To Study the Impact of War and the Defense Program on Agriculture had made three highly significant reports, each of which had predicated changes in the Department policies. Following the April 3 price support announcement, interbureau committees on the affected commodities had been appointed. Thus, by the early summer of 1941, the Department not only had a production program for the basic commodities, but was rapidly extending its program to other agricultural products produced on a large scale.

Congress, in the belief that agriculture should share in the prosperity which defense contracts were bringing to the American economy, raised the mandatory loan rates on basic commodities to 85 percent of parity on May 26, 1941.¹³ Congress also provided the legislative foundation and the financial implementation for programs dealing with nonbasic commodities in the Steagall amendment to the act extending the Commodity Credit Corporation on July 1, 1941. This legislation directed the Secretary to support the prices of all commodities for which he asked production increases at a minimum of 85 percent of parity for a long enough period to permit farmers to make postwar readjustments.¹⁴

Secretary Wickard on July 17, 1941, directed the Chief of the Bureau of Agricultural Economics to establish immediately an Interbureau Production Goals Committee with commodity subcommittees.¹⁵ He instructed the committee to develop figures on requirements for all major commodities. This was the official inauguration of the "production goals program."

The use of the term was natural, in view of the evolution of the Agricultural Adjustment Administration. For years, goals had been set for the five basic crops—cotton, wheat, corn, tobacco, and peanuts. The term came to mean a particular set of figures issued annually by the Department of Agriculture.

But confusion over the exact meaning of the term arose from the fact that there were goals for basic commodities of which we had large surpluses, as well as goals for nonbasic commodities in short supply. The term carried different meanings with regard to different commodities, and these meanings tended to change with varying economic circumstances surrounding the supply, demand, and production of a given commodity. Working with astonishing speed, not only in assembling factual information but in reconciling divergencies of opinion among the various agencies of the Department, the committee had reported to the Program Board before the end of August, and on September 8, 1941, the Department of Agriculture announced "Production Goals for 1942" (312, no. 528-42). This announcement was followed on September 15 by a State-by-State breakdown of the goals.

Recommended increases in production showed significant progress in converting agricultural programs to a wartime basis. This action was taken a full 3 months before Pearl Harbor, in the face of existing large stocks of certain commodities, a very uncertain demand situation, and legal commitments to support prices albeit with limited funds. It was a marked departure from the Department's past programs of production control. Revised production goals for 1942 were announced January 16, 1942. They embodied a sharp upward revision of the goals announced in September 1941, with emphasis on increased production of milk, eggs, hogs, cattle and calves, sheep, and chickens. The sharpest increases were called for in oilseed crops; for these products, farmers were urged to exceed their goals if possible (312, no. 1522-42).

The full educational and informational facilities of the Department were marshaled to sell the production goals program to American farmers. In addition to an intensive press and radio campaign, a county-by-county and farm-by-farm campaign to get farmers to sign up for goals was conducted by the Agricultural Adjustment Administration, the Extension Service, and the Farm Security Administration. In addition to the patriotic urge to contribute to the Nation's war effort, the Department, with legislative authorizations, was able to guarantee wartime and postwar safeguards to farmers. They would not be faced with unreasonably low prices or unmarketable surpluses either during the war or immediately following the end of hostilities.

In addition to cotton, wheat, corn, tobacco, and rice, support prices were announced for dry edible beans, hogs, eggs, evaporated milk, dry skim milk, cheese, chickens, soybeans, and peanuts for nuts (312, nos. 529-42, 2240-41). Farmers were encouraged to make shifts in production from basic crops to some of the special war crops by adapting the provisions of the agricultural adjustment and conservation programs. For example, on April 4, 1941, the Secretary announced that farmers would be permitted to grow peanuts for oil on part of their cotton acreage allotments not used for cotton, without incurring deductions from payments. On June 23, 1941, farmers were told that they could increase peanut plantings over their allotments if the peanuts were grown for oil. The same day farmers in States with minimum acreage requirements of soil-conserving crops or erosion-resisting crops received notice that soybeans were to be classified as an erosion-resisting crop (312, nos. 1993-41, 2181-41, 2606-41). On September 16, 1942, just before the 1942 corn crop went to market, the Secretary proclaimed that marketing quotas for corn would not be established because of the national emergency.¹⁶ Simultaneously, the formulation of goals for 1943 was started and a nationwide productive capacity analysis was undertaken under the direction of Sherman Johnson in the Bureau of Agricultural Economics to serve as a basis for adjusting the goals more closely to the productive powers and limitations of different areas and farms.¹⁷

Whereas in 1942 production could be expanded by tapping unused capacity, increases over 1942 production had to be accomplished largely through shifts in production—peanuts or soybeans instead of cotton; dry beans and flaxseed instead of sugarbeets or, in some areas, wheat. These shifts posed serious problems for farmers, many of whom lacked the necessary technical skill and machinery to produce the needed crops. Farm labor and machinery shortages were developing. In some commodities, effective ceilings on feasible production were imposed by limited storage, processing, and transportation facilities (265, pp. 348–354).

The Administrator of the Farm Security Administration proposed that since the Nation's commercial farmers were already producing at or near full capacity, increases over 1942 record production could be realized only by aiding the smaller, low-income farmers to produce more for market. This could be accomplished by channeling the Department's resources to insure that these small farmers could get the necessary financing, machinery, fertilizer, seed, livestock, and supervision. A Food for Freedom loan with a \$500 limit was made available to low-income farm families who could not be included in the standard rehabilitation loan program of the Farm Security Administration (304, 1942, pp. 206–209).

Some argued, on the other hand, that the labor of marginal farmers on poor land could be more productively used if employed on commercial farms or in industry, and that scarce materials for production would be more effectively used by the more skilled commercial farmers (283, 1943, pp. 607–667). So long as supplies remained fairly adequate, both types of claimants could share them, but the problem was intensified as supplies became tighter (90, ch. 17).

Reorganization for War

The first major wartime reorganization of the Department of Agriculture was announced 6 days after Pearl Harbor. The objective of the reorganization was to centralize responsibility for the execution of the Department's numerous action programs and thus to enable the Secretary to concentrate upon the direction of vital wartime programs.

The first step, effective December 15, 1941, was to regroup Department agencies under the direction of Administrators. By the provisions of Executive Order 9069, dated February 23, 1942, three new administrations were established and the Agricultural Defense Board replaced the Program Board as the top level advisory group to the Secretary. The Agricultural Conservation and Adjustment Administration was formed by combining the Agricultural Adjustment Administration, the Soil Conservation Service, the Federal

Crop Insurance Corporation, and the Sugar Division. The Agricultural Marketing Administration was formed by consolidating the Surplus Marketing Administration, which included the Federal Surplus Commodities Corporation; the Commodity Exchange Administration; and the Agricultural Marketing Service except for the Division of Agricultural Statistics. The six scientific research bureaus, the Office of Experiment Stations, and the Beltsville Research Center were grouped together to form the Agricultural Research Administration. Rudolph M. Evans became Administrator of Agricultural Conservation and Adjustment; Roy F. Hendrickson, Administrator of Agricultural Marketing; and Eugene C. Auchter, Administrator of Agricultural Research.

These realignments left five line agencies in their former independent status: Farm Security Administration, Rural Electrification Administration, Commodity Credit Corporation, Farm Credit Administration, and Forest Service. The Agricultural Defense Board was composed of the eight group administrators and the heads of the Office of Agricultural Defense Relations, the Bureau of Agricultural Economics, and the Extension Service (*306, nos. 960; 975; supps. 3, 12 to no. 975*). On February 25, 1942, the Agricultural Defense Board was renamed the "Agricultural War Board."

Interdepartmental Relations

Following Pearl Harbor, the administration moved rapidly to organize the economy for all-out war. The Economic Defense Board was reconstituted as the Board of Economic Warfare on December 17, 1941.¹⁸ On January 16, 1942, the War Production Board was established.¹⁹ It was given broad powers to determine "the policies, plans, procedures, and methods of the several Federal departments, establishments, and agencies in respect to war procurement and production" and issue appropriate and necessary directives.

Food functions of the War Production Board included the control of the amount of industrial capacity, raw materials, and labor used in the manufacture of farm machinery, fertilizers, and food-processing equipment; the assignment of shipping space and importation of agricultural products in critically short supply; and the formulation of food and fiber requirements. This last responsibility was eventually assigned to an interagency committee of the War Production Board with the Secretary of Agriculture as its chairman.²⁰

Control over farm labor eligible for military service was vested in the Selective Service System. The procurement of foreign supplies and the shipment of food to the Allies and friendly neutrals were the responsibilities of the Department of State, the Board of

Economic Warfare, and the Lend-Lease Administration.

The formulation and administration of price control and rationing programs were vested in the Office of Price Administration, with certain statutory limitations on the minimum levels at which price ceilings on agricultural products could be set and a limited veto power vested in the Secretary of Agriculture. Thus, as described in a Bureau of the Budget study, the responsibility for management of the food supply was distributed among several war agencies. "This distribution of authority," according to this study, "did not give any single agency clear-cut authority to plan for future emergencies . . ." in the food field. The administration decided that "Complete authority for food management could not be concentrated in a single agency," because of the close interrelationship between food problems and other industrial and military requirements for such vital products as glycerin, nitrogen, steel, and manpower (265, pp. 328-332).

A device for reconciling disagreements on food price policy was provided by Executive Order 9250, issued October 3, 1942, which established the Office of Economic Stabilization.²¹ Justice James F. Byrnes resigned from the Supreme Court to head the new agency. The solution of a second problem, coordination between Government agencies in the formulation of food and fiber requirements, was assigned to the Foods Requirements Committee of the War Production Board, created on June 5, 1942. Differing recommendations were made on where and how authority should be centralized. The Foods Requirements Committee was a compromise solution, placing the authority within the War Production Board but naming the Secretary of Agriculture as its Chairman. The creation of the Combined Food Board, June 9, 1942, as an enlarged and more formal successor to the Anglo-American Food Committee, was a move to solve still a third operational problem, the worldwide coordination of food resources available to the Allied Powers (360).

Field Organization

During the defense period, the State and county land use planning committees which had been provided for under the 1938 reorganization and the Mount Weather agreement were being established gradually in the States and counties. It was a program which would have taken several years to reach maturity. By September 1941, 47 States and nearly 1,900 counties had set up land use planning committees, but more than a third of the agricultural counties in the United States still had no such committees. H. R. Tolley, Chief of the Bureau of Agricultural Economics, urged repeatedly during 1940 and 1941 that the State and local land use

planning committees continue to be used to coordinate agricultural programs in the field during the wartime emergency.²²

State and county defense boards were established by Secretary's Memorandum 921 on July 5, 1941. State and county Agricultural Adjustment Administration chairmen were named chairmen of the new boards and the membership included the representatives of all Department of Agriculture agencies having field organizations. The functions of the defense boards were to coordinate in the field the defense activities of the Department, and to "confer with, advise, and arrange cooperation with other defense agencies having state and local offices." The defense boards were to report to the Secretary. They were renamed "war boards" on January 7, 1942.

Secretary Wickard explained to the House of Representatives Committee on Appropriations that it was necessary to name Agricultural Adjustment Administration men as chairmen of new field committees because:

(1) The A.A.A. is the only action agency that has personnel available in every State and every county; (2) A.A.A. employees are administratively responsible to the Secretary of Agriculture . . . ; (3) the A.A.A. itself must carry a large share of the war-production load, because of course the A.A.A. is organically the agency designated by the Congress for production adjustment and control and has always devoted its energies to such adjustments, upward or downward, as domestic and foreign conditions require; (4) unless absolutely necessary I did not wish to add more personnel to the payroll or ask for special defense appropriations in providing for improved program coordination at the State and local levels (283, 1943, p. 702).

In 1942, the defense boards, renamed "war boards," were described by the Secretary in his annual report as "the shock troops of agriculture's Food for Freedom Program."

The wartime reorganization of the Department, of necessity, stressed the short-term food production aims of the Government—food requirements, production capacity, allocations and controls, and the centralization of authority in a direct chain of command from the Office of the Secretary or Food Administrator to the individual producer. For the time being, long-range objectives were obscured. In his annual report for 1942, the Secretary wrote:

In June last [1942] . . . as the Nation shaped its activities more directly to the tasks of war, the Congress eliminated funds for maintaining State representatives of the Bureau of Agricultural Economics in the cooperative land use planning system. Hence the Department's formal participation in the program came to an end (304, 1942, p. 174).

The Office of Land Use Coordination continued as a staff office of the Secretary until January 1, 1944, though the Land Use Coordinator was not appointed to membership on the Agricultural Defense Board. Milton Eisenhower, who held this post, left the Department, after having served it for 16 years, to become the Director of the War Relocation Authority on March 18, 1942.

After the Office was abolished, the Land Use Coordinator was transferred to the immediate Office of the Secretary.²³

On the brighter side, there was no wholesale plowup of grasslands during World War II, even though postwar relief food needs would lead to the plowup of about 4 million acres. The World War II production increases were achieved on very little more tilled acreage than was under cultivation before the war. The total acreage of 52 commercial crops increased from 344 million in 1939 to 360 million in 1945—less than 5 percent (389, p. 51). The progress in land use of the prewar period was not lost, and the planning experience held valuable lessons for the future.

The lessons to be learned from the land use planning experiment have been carefully studied by agricultural economists, sociologists, and political scientists. Their diagnoses agreed that land use planning was not an unqualified success but emphasized different weaknesses. Neal C. Gross, a rural sociologist of Iowa State College, said:

A planning program will not succeed unless the people want it to succeed. This primary goal of county planning has been relatively neglected by the administrators of county planning, despite utterances to the contrary. . . . In short, the ultimate objective of county planning should not be the solution of certain immediate problems; it should be to develop a community determination to solve problems. . . .

If rural planning is to be successful . . . specialists . . . must yield their narrow concepts into a broader, unified view of what the specialists are aiming at in toto. . . .

This clarity of purpose was not understood by the farmers, experts, and administrators connected with rural planning. They did not understand that in reality they all were working for the same objectives only through different channels and approaches (95, pp. 648-652).

John D. Black, agricultural economist at Harvard University, wrote in 1947:

But an even more serious difficulty with the whole undertaking was its very comprehensiveness. It really undertook to do too much all at once. The people in the counties were very far from ready for full-scale comprehensive county-wide planning. They had mostly not reached the stage of planning their own individual farms, forests, recreation areas, marketing enterprises, credit enterprises, etc., when they were suddenly asked to plan adjustments for a whole county as a unit. . . . Perhaps five years from now, enough of such planning for individual operating units will have been done in many of the counties. . . . The Agricultural Extension Service will then be ready to take part in a program of program planning on a county-wide basis. It had better begin, like the 1938 one, with land use. . . . (32, pp. 1039-1040).

Following the establishment of the Agricultural Defense Board, a War Board Advisory Committee was set up, and Fred Wallace, Chief of the Agricultural Adjustment Agency, was appointed Special War Board Assistant to the Secretary by Secretary's Memorandum 975, Supplement 12, on March 23, 1942.

The State and county war boards provided coordination between Department agencies in the field, but the Secretary reaffirmed the role of the Extension Service as the educational arm of the Department by issuing on February 11, 1942, the "Extension Service Charter" stating that "The Extension Service is responsible for all group or general educational work essential to a fundamental understanding of all action programs" and that the educational program "*must, without exception, include all that is necessary to an understanding by rural people of each program individually and of all programs as a unified whole.*"²⁴

The water facilities program had been initiated under the Pope-Jones bill which became law on August 28, 1937. It was administered in the Department of Agriculture by the Water Facilities Board which coordinated the activities of three Department agencies: The Bureau of Agricultural Economics did the general planning, and the Soil Conservation Service and the Farm Security Administration were in charge of operations. Since expenditures for this program were not directly contributing to national defense, appropriations for it were reduced about 25 percent for the 1942 fiscal year. As of July 1, 1942, operations were consolidated in the Farm Security Administration, and the Water Facilities Board was abolished.²⁵ The next year, 1943, only \$202,585 was appropriated for this work. In the 1944 and 1945 fiscal years, appropriations were increased to about \$1 million annually, about one-third of the funds provided in 1940 (283, 1946, pt. 2, p. 595).

Department Service Functions Streamlined

Up until 1942 the Department of Agriculture Library was really a group of independent libraries supported by the various agencies. Every year from 1920 on, the Department Librarian pointed out the deficiencies of the decentralized system. The agencies which had developed and controlled their libraries, for over 50 years in some instances, were understandably reluctant to release their collections to a central library.

The pressure of wartime activities finally furnished the impetus for consolidation. Step by step, library functions—cataloging, purchasing, supervision, and evaluation—were centralized. Finally, in February 1942, all library facilities remaining in the agencies and bureaus were ordered transferred to the central departmental Library.

Consolidation was accomplished under the direction of Ralph R. Shaw. It resulted in major economies in operation. In the ensuing years, the Library pioneered in the adaptation to library work

of modern management techniques and technological improvements. It pioneered in photocopying, microfilming, and microfilm reading techniques (154).

Like the Library, the information services of the Department had grown up as independent facilities of the various agencies. Coordination took place in many steps over a period of years. Secretary Wickard, on March 28, 1941, issued instructions to all Department agencies that insofar as possible, all press and radio releases should be issued in the name of the Department of Agriculture, rather than in the names of the various bureaus and agencies (306, no. 894).

A field information service under the Office of Information, established on May 23, 1941, had to be discontinued in July 1943 owing to lack of funds (306, no. 907). The establishment of the Office of War Information on June 13, 1942, with the responsibility for coordinating and clearing war-related information emanating from various Government agencies with which the Department of Agriculture shared food responsibilities, necessitated the centralization of authority for clearing news releases within the Department.²⁶

The Director of Information of the Department was designated liaison officer with the Office of War Information, with general responsibility for carrying out the regulations of the Office of War Information as they affected the Department and its constituent agencies (306, no. 1025). In addition to this change, made on July 20, 1942, the Secretary, at the time of the December 1942 reorganization, formally assigned to the Director of the Office of Information the responsibility for directing, integrating, and coordinating the information activities of the several agencies of the Department, and authorized him, subject to the approval of the Secretary, to transfer and assign duties to information personnel in the various agencies (306, no. 1054).

The Department's Office of Information also served the War Food Administration. As the war progressed, the centralization of control in the Office of War Information was increased and finally, starting on February 10, 1943, all news releases except crop reports and releases that were not war connected or did not involve any other agency of the Government were issued only from the News Bureau of the Office of War Information (312, no. 1574-43). Work in the Office of Information was increased manyfold by the wartime food programs.

Since the Nation's agricultural plant is composed of several million small operators, and since every citizen is a consumer of food, much of the success of the food program hinged on keeping the public informed, and in getting public cooperation in activities related to production goals, victory gardens, Food for Freedom, food conservation, price control and rationing, and others.

The Solicitor's Office had grown rapidly during the late thirties, as one by one the legal staffs of the various agencies were incor-

porated into the departmental Office of the Solicitor. Until July 1942, each of these agencies was represented by a corresponding division in the Solicitor's Office. The reorganization of July 20, 1942, provided for the consolidation of divisions engaged in similar lines of work, reducing the number of divisions from 12 to 6, and placing each under the supervision of an Associate Solicitor.²⁷ Following the departmental reorganization of December 1942, the Solicitor's Office was again reorganized so as to conform more directly to the structure of the Department.²⁸ The Solicitor's Office provided staff services to the War Food Administration during the 2 years of its existence.

Wartime Research

Scientific research in the period between the two World Wars had been directed mainly along three lines: (1) Increasing the quality and quantity of agricultural production through the development of improved varieties of plants and animals and improved methods of production, and by eliminating diseases and insect pests; (2) finding new uses for agricultural products, particularly those of which we had been producing unmarketable surpluses; and (3) improving and conserving the soil.

In many instances research programs started in the 1930's produced rather unexpected fruits under the stimulation of wartime needs. Development of aerial photography and mapping techniques by the Soil Conservation Service and the Forest Service during the 1930's produced a direct and tangible contribution to the war effort. Not only were the techniques developed by these agencies used by the Army Map Service, but the entire staffs engaged in this work were employed round the clock for 4 years in producing maps for the military. Starting in September 1941, certain specified areas in the United States were mapped. Then as the Allies began to take the offensive, many miscellaneous special maps such as bomb target charts, maps of areas where commando raids were projected, aeronautical charts, and flight charts were prepared for the Army, Navy, and Air Force. Military photoreconnaissance results were flown directly to Department of Agriculture laboratories. A contact color photographic method was developed for proving maps before reproduction. It was superior to all other known methods of color photographic proving. Virtually all the theaters of military operations were represented in the maps produced in the Department of Agriculture (394).

The Forest Products Laboratories developed a process for making industrial alcohol from woodpulp. Research on the use of molded, pressure-laminated plywoods made the production of

wooden mosquito bombers practicable. The application of research findings to the production of containers was vital in view of the large quantities of foods, manufactured goods, and war materiel that had to be shipped and stored under diverse and often unfavorable conditions. Plastics, plastic laminates, moisture-resistant and moistureproof paper products were developed and tested.

The Regional Research Laboratories produced and tested many new products which were needed for the war effort. Various rubber substitutes and rubber additives were developed. Substitutes for cork, essential drying oils, and other industrial oils were discovered. The mass production of penicillin was made possible by Department research. The development of improved cultures and the use of cornsteep liquor, a byproduct of the constarch industry, and lactose, a milk sugar, combined as a medium for growing the bacteria, increased yield about 100 percent and furnished the technological basis for the commercial production of penicillin. Mildewproof and rotproof fabrics were produced for the use of the Armed Forces. New glues, plastics, and paints were developed from milk solids, soybean proteins, and other agricultural products. A process for using short staple cotton to augment the supply of cotton linters for use in the manufacture of guncotton was perfected. The use of wheat to replace corn in the production of industrial alcohol was developed in the laboratory and tested on a large scale in a beverage distillery converted to the wartime production of industrial alcohol.

New and improved methods of preserving foods so as to reduce their weight and bulk made essential contributions to the war effort by reducing the strain on transportation facilities. Revolutionary advances were made in food dehydration, and known but previously little-used processes were adapted to commercial production. The spray process for drying skim and whole milk made it possible to produce dry milk which could be reconstituted into palatable fluid milk. The spray drying of eggs was equally successful. Though meat had been preserved by drying since prehistoric times, new processes provided a greatly improved product.

Development of a dehydrated potato which could be reconstituted into a product acceptable at the dinner table was a new process. Various dried vegetables and meats were combined in prepackaged soups and stews. A final discovery was that dehydrated foods could be compressed into small packages for shipping. In development of these new processes and products, the regional laboratories and the Bureaus of Animal Industry, Dairy Industry, and Home Economics were cooperators.

The frozen food industry was in its infancy at the beginning of the war. Its growth was greatly accelerated by the shortage of tin for cans, the large increases in the production of fruits and vegetables, and the enthusiastic public acceptance of the frozen products. Department research in processing and packaging frozen food was instrumental in bringing about the commercial

success of these products. However, the greatest expansion in the frozen food field was delayed until after the end of the war due to shortage of materials for the construction of processing, storage, and distribution facilities.

Technological advances in farming methods resulting from research were applied by farmers on a wide scale. They may be credited to a considerable degree with the success of farmers in tremendously increasing food production without greatly increasing acreage in crops and despite shortages of labor and machinery. Perhaps the outstanding example was the per acre increase in corn production by the all but universal adoption of hybrid seed and the use of fertilizer by farmers growing corn.

Less spectacular improvements were made in seeds for oats and wheat. Increased milk production resulted not so much from larger numbers of cows on farms as to stock improved through selective breeding and more scientific feeding. Leaner, meatier hogs and small turkeys were produced. New varieties of flax and soybeans and sugarbeet seed segmentation helped farmers succeed in growing these badly needed wartime crops (304, 1942, 1943, 1944).

Department research in insect control aided the military forces from the beginning of the defense period. The control of lice, fleas, mosquitoes, and flies is vital to maintenance of health and efficiency among military personnel, as well as horses and dogs used by the military. With funds provided by the Office of Scientific Research and Development, the Bureau of Entomology and Plant Quarantine developed new methods for delousing personnel and their clothing, new and more effective insect repellants and pesticides, and improved means of application for the control of mosquitoes and flies. When the war cut off supplies of rotenone and pyrethrins, it became vital to make the most efficient use of available supplies. Fortunately, the use of aerosols emerged from the laboratory in 1940 and became a practical means of spreading insecticides. Aerosol spray is so fine that it will remain suspended in the air for some time. It reaches a much larger percentage of the insects in a given area than ordinary sprays or dusts, with a much smaller expenditure in insecticide. The entire output was immediately requisitioned by the military services.

In August 1942 a small sample of a new insecticide that has come to be known as DDT was received from Switzerland. Its chemical composition was unknown to American scientists. Department scientists at Beltsville quickly analyzed and synthesized the compound which furnished the active ingredient of the Swiss insecticide. They found that its preparation was relatively simple and all of the materials were readily available. During the war, the entire output was used by the military forces. Another new insecticide, benzene hexachloride, was investigated by the British and French before it was introduced into this country in 1943. Tests in Department laboratories showed that for some purposes it was more effective than DDT (96, 128, 132).

Rural Electrification Administration engineers provided assistance to the military in numerous ways—electrical connections for military installations, a communications system during the construction of the Alcan Highway to Alaska, and a solution to the problem of electrical interference of a submarine detector—to mention only a few instances.

The program for the increased production of cultivated rubber trees in Latin America was initiated on June 22, 1940, as a part of a program to encourage the production of complementary rather than competing products in Latin America and to increase Western Hemispheric self-sufficiency. Survey parties investigated sites for rubber plantations, aid was given in establishing rubber experiment stations in Latin America, and promising high-yielding clones were procured from the East Indies. By December 7, 1941, over 10 million rubber tree seeds had been planted as part of a cooperative program, and a final shipment of 5,500 budded trees from the Philippines had been received. The Department continued to carry on research and to distribute seeds and budded stumps, though no appreciable amount of rubber could be harvested from this source during the national emergency (178).

Another source of natural rubber was the guayule shrub, a plant native to the southwestern part of the United States and to Mexico. Commercial shipments had been made from Mexico for many years, and the Intercontinental Rubber Co. had several hundred acres of plantations and a small extraction plant in the Salinas Valley of California. Guayule rubber in this country, however, could not compete at normal prices with the plantation rubber from the Malay States and the East Indies. Under the Emergency Rubber Production Act approved March 5, 1942, Congress authorized the Department of Agriculture to acquire the properties and processes of the Intercontinental Rubber Co. and expand rubber production from this source as rapidly as possible. If the war had continued beyond 1945, these guayule plantations would have been the chief contributors to our supplies of natural rubber as stockpiles became exhausted (304, 1942, pp. 151–157). The successful development of synthetic rubber production on a commercial basis made natural rubber supplies far less critical.

¹ Will W. Alexander, Farm Security Administrator, telegram to regional directors, Sept. 7, 1939, Secretary's Files, War File (McCamy), USDA, National Archives; U.S. Bureau of Agricultural Economics, Division of Program Surveys, Attitudes Toward the War and Its Effects on Agriculture, May 15, 24, 1940, History Branch Files, USDA.

² Memorandums: Eric Englund, Sept. 15, 1939, M[ordecai] E[zekiel], Oct. 4, 1939, L. H. Bean, Sept. 13, 1939, Robert H. Shields, Sept. 18, Oct. 4, 1939, Fred W. Henshaw, Sept. 14, 1939, Mastin G. White, Sept. 5, Oct. 10, Nov. 3, Nov. 14, 1939, Secretary's Files, War File (McCamy), USDA, National Archives; Significant Foreign Developments (weekly summary started in Oct. 1939), Office of Foreign Agricultural Relations, History Branch Files, USDA.

³ Memorandums: Milo Perkins to James McCamy, Jan. 30, 1941, Milo Perkins to H. R. Tolley, Nov. 4, 1940, Secretary's Files, War File, USDA, National Archives.

⁴ Letter, Claude R. Wickard to Harry Hopkins, Jan. 30, 1941, Secretary's Files, War File, USDA, National Archives.

⁵ The Impact of War and the Defense Program on Agriculture, Report by Interbureau Committee for Annual Outlook Conference, Mimeographed, 21 pp., Oct. 21, 1940, History Branch Files, USDA.

⁶ National Defense Advisory Commission, Agricultural Division, Statement of Planning and Procedure Committee, Nov. 4, 1940, National Archives.

⁷ Letter, Chester Davis to Franklin D. Roosevelt, Mar. 6, 1941, History Branch Files, USDA.

⁸ Letter, Franklin D. Roosevelt to Chester Davis, Mar. 19, 1941, as quoted in letter, Chester Davis to William S. Myers, Oct. 12, 1943, History Branch Files, USDA.

⁹ The Impact of War and the Defense Program on Agriculture, Oct. 21, 1940, History Branch Files, USDA.

¹⁰ Secretary's Files, War File, Folder on the Executive Committee on Commercial Policy, Folder on Supplies (Foreign) Correspondence and Reports, USDA, National Archives.

¹¹ The Impact of the War and the Defense Program on Agriculture, Report II, The Outlook for 1941, Subcommittee of Interbureau Coordinating Committee, Typewritten, 11 pp., Feb. 17, 1941, History Branch Files, USDA.

¹² Memorandum, R. C. Miller to Chester C. Davis, Mar. 6, 1941, National Defense Advisory Commission Records, National Archives.

¹³ 55 Stat. 203.

¹⁴ 55 Stat. 498.

¹⁵ Memorandum, Claude R. Wickard to H. R. Tolley, July 1, 1941, Secretary's Files, USDA, National Archives.

¹⁶ 7 F.R. 7334.

¹⁷ U.S. Department of Agriculture, Agriculture's Wartime Production Capacity, Mimeographed, pt. 1, 80 pp., Aug. 1942, History Branch Files, USDA.

¹⁸ 6 F.R. 6530.

¹⁹ 7 F.R. 329.

²⁰ U.S. War Production Board, Press release 1295, June 5, 1942.

²¹ 7 F.R. 7871.

²² U.S. Department of Agriculture, Minutes of the Administrative Council, 1940-41; Tolley, H. R., Cooperative Land Use Planning, a Product of Changing Conditions in American Agriculture, Mimeographed, 22 pp., Oct. 1940; Allin, B. W., Agricultural Land Planning from the Federal Point of View, Mimeographed, 9 pp., May 1941; Memorandum, H. R. Tolley to Paul H. Appleby, May 29, 1941, Suggestions for Improving the Cooperative Planning Process, Mimeographed, 9 pp., War Records Project Files, History Branch Files, USDA.

²³ Baker, G. L., Factors Relevant to Reorganizations for War, Typewritten manuscript, 1947, History Branch Files, USDA, pp. 334, 401.

²⁴ Excerpts from directive appear in *Federal Legislation, Regulations, and Rulings Affecting Cooperative Extension Work in Agriculture and Home Economics*, U.S. Dept. of Agr., Misc. Publ. 285, Rev. 1946.

²⁵ Simons, H. J., An Administrative History of the Water Facilities Program of the U.S. Department of Agriculture to July 1, 1942, Typewritten, 225 pp., History Branch Files, USDA.

²⁶ 7 F.R. 4468.

²⁷ Solicitor's Memorandum 16-1942, History Branch Files, USDA.

²⁸ Solicitor's Memorandum 1-1943, History Branch Files, USDA.

The War Food Administration, 1943-1945

The magnitude of the food job had been obscured in the early part of the war by the tremendous supplies of basic commodities on hand and the great productive capacity of American agriculture. By the fall of 1942, however, problems in production and distribution were multiplying. Many diverse groups were urging the President to further centralize authority over food. Among these were the farm organizations, food trade organizations, and the British Food Mission. The President delegated greatly increased responsibility over food to the Secretary of Agriculture by Executive Order 9280 on December 5, 1942.¹ The agricultural press hailed the establishment of a "Food Administration" within the Department of Agriculture, although this name was not officially used until 4 months later (8, 137).

The Secretary was given five mandates: (1) To ascertain food requirements, civilian, military, domestic, and foreign; (2) to formulate and carry out a program designed to furnish a supply of food adequate to meet all requirements; (3) to assign food priorities and make allocations; (4) to insure the efficient and proper distribution of the available supply of food; and (5) to promulgate policies to govern the purchase and procurement of food by Federal agencies.

To facilitate the necessary cooperative relations between the Department of Agriculture and other agencies, the Secretary was directed to appoint the Food Advisory Committee, which would supersede the Foods Requirements Committee. This committee was to be composed of representatives of the State, War, and Navy Departments; of the Office of Lend-Lease Administration; of the Board of Economic Warfare; and of such other agencies as the Secretary might decide were concerned with the food program (312, no. 1179-43).

The major new powers given to the Secretary by the establishment of the "Food Administration" were those concerned with the assignment of priorities and the making of allocations. These

powers had formerly been assigned to the War Production Board. The Secretary also, at this time, became a member of the War Production Board, thus raising the status of the food agency to that of a primary claimant under the War Production Board's controlled materials plan.²

Differences of viewpoint between the Secretary and the heads of other agencies were to be resolved by the Director of the Office of Economic Stabilization as the President's agent.³ Director James F. Byrnes already had the responsibility for resolving differences between the Department of Agriculture and the Office of Price Administration. Five months later, the creation of the Office of War Mobilization in the Executive Office of the President gave formal recognition to the gradual enlargement of the duties of Director Byrnes, who was elevated to the position of Director of the new office.⁴ Frederick M. Vinson replaced Byrnes as Director of Economic Stabilization. The quasi-judicial functions of the Director of War Mobilization resulted in Byrnes becoming popularly known as the "Assistant President." Judge Marvin Jones took leave of absence from the United States Court of Claims to head up the Food Division of the new office.⁵

As measured by Herbert Hoover's yardstick of authorities without which no food administrator could hope to succeed, the Secretary lacked sufficient authority with reference to prices, rationing, imports, and manpower.⁶ Executive Order 9280 specifically stated that nothing in it should be construed to limit the power exercised by the Director of Economic Stabilization under Executive Order 9250 or by the Price Administrator under the Emergency Price Control Act of 1942 or the Economic Stabilization Act of October 2, 1942. Thus, the Secretary's limited authority over prices remained unaltered. His prerogatives were further limited by the requirements that he must consult the Price Administrator before determining the time, extent, and other conditions of civilian rationing, and that the programs, once agreed upon, were to be administered by the Office of Price Administration. The Secretary's authority over exports and imports of food could be exercised only in collaboration with other Government agencies.

Department Reorganization

Within the Department, Executive Order 9280 provided for the second major reorganization of the period. In order to set up, in effect, a food administration within the Department, a Food Production Administration and a Food Distribution Administration were organized. The Food Production Administration comprised the Agricultural Conservation and Adjustment Administration,

which had been organized a year earlier, plus the Farm Security Administration and the Farm Credit Administration. The Sugar Agency was withdrawn from the 1941 grouping and added to the reorganized Agricultural Marketing Administration.

Herbert W. Parisius, who had once served as an official of the Farm Security Administration and, more recently, as Associate Director of the Office for Agricultural War Relations, was appointed Director of the Food Production Administration on December 10, 1942 (306, no. 1054). But owing to his inability to present a plan of organization and to nominate assistants acceptable to the Secretary and his advisers, Parisius resigned, January 15, 1943.⁷ Following his resignation, M. Clifford Townsend, who had been Associate Director of the new Administration, was appointed Director. Townsend, a onetime Governor of Indiana, had served in the Department as Director of the Office for Agricultural War Relations and Administrator of the Agricultural Conservation and Adjustment Administration. John B. Hutson, who had served as President of the Commodity Credit Corporation, became Associate Director and Executive Officer of the Food Production Administration (312, no. 1362-43).

The plan of organization which was announced on January 22, 1943, left the constituent agencies with "no extensive changes" in their internal administrative structures.⁸ Six new branches were established to "take the lead in developing integrated programs of food production"—the Production Programs Branch, Agricultural Manpower Branch, Conservation Programs Branch, Price Support and Loan Programs Branch, Production Supplies Program Branch, and Distribution of Farm Supplies Branch. They reported to a Deputy Director in charge of program planning. A seventh new branch, the Production Loans Branch, was given semiautonomous status under a second Associate Director. The Farm Credit Administration remained a separate agency.

Roy F. Hendrickson, who had been Administrator of the Agricultural Marketing Administration, was named Director of the Food Distribution Administration (306, no. 1054). The organization of the agency, announced January 15, 1943, provided for four Deputy Directors and the Chief of Requirements and Allocations Control who reported to the Director. One of the Deputy Directors was responsible for nine commodity branches. A second was responsible for the Administrative Services, Compliance, Program Analysis and Appraisal, and Transportation and Warehousing Branches and the Program Liaison Division. The Civilian Food Requirements, Civilian Programs, and Nutrition and Food Conservation Branches were under a third Deputy Director. The fourth was responsible for the Food Industries Labor, Processors, Facilities, and Wholesalers and Retailers Branches.⁹ The administrative machinery and personnel for the Food Distribution Administration had been assembled from the marketing research and regulatory services in the Department, the agencies with food pro-

curement responsibilities in the Department, and those sections, divisions, and branches of the War Production Board which were concerned with food distribution. Roy F. Hendrickson, as Food Distribution Administrator, was markedly successful in molding a cohesive organization from these diverse elements.

Problems Under New Food Authority

Responsibility for determining food rationing policies presented the new Food Distribution Administration with pressing and difficult problems. Jurisdictional lines and operating procedures had to be worked out with the Office of Price Administration at a time when shortages of fats and oils, meats, and processed fruits and vegetables were pointing up the need for action (265, pp. 359-361).

Secretary Wickard and Price Administrator Prentiss M. Brown signed an agreement on February 12, 1943, defining the responsibilities of the two agencies (312, 1621-43).

The Department's responsibility for determining the supplies of food for civilian consumption and allocating them was recognized. The Department was also recognized as having the responsibility for determining the need for and the time and extent of rationing. The Office of Price Administration was recognized as being responsible for developing rationing programs, techniques, and procedures. This agreement provided a satisfactory basis for day-to-day operations.

Only 2 months after the reorganization was announced, and before the new Food Distribution and Production Administrations had really had time to begin to function, the Committee on Appropriations of the House of Representatives began hearings on the Agriculture Department appropriation bill for 1944. There was great emphasis on the curtailment of programs which were not contributing directly to national defense and reducing nondefense expenditures. The Federal crop insurance program was temporarily discontinued at the end of the 1943 crop year because Congress failed to appropriate funds for insuring crops in 1944. Upon signing the Appropriation Act, July 12, 1943, President Roosevelt stated:

The reason assigned for putting an end to crop insurance is that it was too expensive. It was to be expected that in perfecting a program of such magnitude the Government would have to go to much expense, and it would take several years to give it a fair trial. I do not feel that the Department of Agriculture has been given sufficient time to demonstrate the practicability of crop insurance. Any program involving so many complications and such a great amount of educational work with the farmers cannot be placed on a sustaining or entirely satisfactory basis within a few years. . . .

Certainly in these times when the farmer is being urged to produce more and assume greater risks, we should not stop a program which is of such tremendous potential value to them.

I certainly hope that when Congress returns from its recess, funds will be provided to continue this program. . . . (75, 1943, pp. 4-5).

This strong administration support for crop insurance finally resulted in the enactment by Congress of a new and enlarged crop insurance program in December 1944.¹⁰

The Farm Security Administration was also extensively discussed by Congressmen and witnesses at the hearings on the appropriation bill. While the hearings were in progress, the House of Representatives set up, on March 18, 1943, the Select Committee To Investigate the Activities of the Farm Security Administration (271). This came to be known as the Cooley committee, after its sponsor and chairman, Harold D. Cooley of North Carolina. The tenant purchase, rehabilitation loan, and rural health programs of the Farm Security Administration under the Bankhead-Jones Act were generally regarded with approval, though not as primarily defense oriented, and therefore they were subject to temporary wartime reductions in appropriations. The same was true of the water facilities program, which had been placed under the Farm Security Administration a year earlier (271, Dec. 16, 1943). Consequently, Farm Security Administration funds were greatly reduced. Administrator C. B. Baldwin resigned on November 15, 1943, and was replaced by Frank Hancock, who had served as a Representative from North Carolina.¹¹

Wartime prosperity enabled Farm Security borrowers to pay and even prepay installments on their loans. The purely relief aspects of Farm Security activities were practically ended by 1943 (330, 1943-44, pp. 6-7; 257, p. 407). The passage of the Servicemen's Readjustment Act of 1944 made World War II veterans eligible for the benefits of the Bankhead-Jones Farm Tenant Act to the same extent as though they were farm tenants, provided they were qualified by ability and experience to carry on successful farming operations.¹² The Farm Security Administration county committees were made the nuclei of the county veterans' agricultural loan committees organized in December 1944. Their job was to certify veterans as eligible for "GI loans" for the purchase of farms or farm equipment under the Servicemen's Readjustment Act (330, 1944-45, pp. 2-3).

Distribution of free food to low-income families through the food stamp plan was suspended by order of the Secretary on March 1, 1943, owing to food shortages and relatively full employment (312, no. 1245-43). The school lunch program was continued.

The Rural Electrification Administration had been brought into the Department on July 1, 1939 (306, no. 827). The electrification of rural America continued rapidly during 1940 and 1941, but the war put a virtual halt to rural construction in 1942. The War Production Board, which was responsible for the scale of priorities, relaxed its restrictions somewhat in January 1943, so that farmers near existing powerlines could obtain extensions, if they could show that electricity would mean an increase in production or a decrease in labor (350).

The Rural Electrification Administration and its borrowers were

able during the war years to assimilate and consolidate the rapid growth of the prewar years and to plan for a new period of growth in the postwar years. In 1942, rural electric borrowers organized the National Rural Electric Cooperative Association, a trade association incorporated in the District of Columbia. In a number of States, State associations were formed. In 1944, Congress passed the Department of Agriculture Organic Act, also known as the Pace Act. This act provided an indefinite extension to the rural electric loan authorization authority, established an interest rate of 2 percent on rural electric loans, and extended the maximum amortization period from 25 to 35 years.¹³ The Rural Electrification Administration continued to examine applications, so that when the war ended it was prepared to ask Congress for appropriations to finance the mass construction of rural lines.

Many peacetime activities of the Forest Service were curtailed. The nationwide forest survey, reforestation work, and land acquisition were virtually halted. Labor shortages severely depleted the regular fire protection forces. The fire danger was dramatized by the attempts of Japan to fire west coast forests with incendiary bombs carried by balloons. This hazardous situation was met by the establishment by the Office of Civilian Defense of a volunteer Forest Fire Fighters Service. Some 185,000 citizens enrolled.

World War II made heavy inroads on the Nation's forests as wood became a critical war material. A large-scale logging project in Alaska for the production of urgently needed aircraft spruce was undertaken, along with a special timber production war project (338).

Along with the unusual attention given to the reduction in Government expenses for nondefense programs, the House Appropriations Committee displayed active interest in the manner in which Department funds were used in making direct or indirect production payments to farmers. On January 26, 1943, the Secretary had publicly proposed a program of incentive payments to encourage increased production of certain badly needed crops (312, no. 1441-43). To finance the program, he had asked Congress for an increase of \$100 million in appropriations for agricultural adjustment payments. Most farm organization leaders immediately labeled this a subsidy program and asserted that farmers wanted parity in the marketplace, not subsidies (283, 1944, pp. 1380-1381, 1357-1358). Thus the Department's production program was entangled in the administration's economic stabilization problems. Events had been moving toward a crisis for a year.

According to Murray T. Benedict:

The Administration was faced with a difficult choice. Both farmers and labor wanted more money. Demand was sufficiently active to enable them to get it if the market was left free of controls. Farmers . . . contended that labor would be allowed to gain at the expense of agriculture unless wage rates were frozen. Labor was restive and certainly would not agree to continuing under the Little Steel formula if costs of living mounted rapidly. . . .

As a partial solution to the problem, the Office of Price Administration issued its General Maximum Price Regulation of April 1942. This froze retail prices, and the cost of services at retail, at the levels prevailing in March 1942. Rentals on residential properties were also frozen. However, under the legislation then in effect, the prices of farm products could not be put under ceilings until they reached substantially higher levels. Consequently, they continued to rise and were creating a serious threat to the whole stabilization program.

As a result of vigorous presidential pressure, the Congress was induced to pass, in October 1942, an amendment (56 *Stat.* 765) which permitted the establishment of ceilings on the prices of farm products at parity or the highest price paid between January 1, 1942, and September 15, 1942, whichever was higher. At the same time all adjustments in wage rates, whether by settlement of disputes referred to the War Labor Board or by voluntary agreement, were placed under the Board's supervision. Guarantees of support for farm prices, mostly at 90 percent of parity, for two years after the close of the war were also included (27, pp. 296-297).

Walter W. Wilcox, in *The Farmer in the Second World War*, adds the observation that—

The American Farm Bureau Federation and spokesmen for agriculture in Congress had indicated . . . clearly that they wanted parity prices or necessary prices to get the needed production through the market. One phase of this was a dispute between congressional leaders and the President . . . regarding allowance for AAA payments in computing government loan rates and ceiling prices for basic commodities. When prices reached parity levels, farm leaders shifted their demands to full payment through the market of prices necessary to stimulate production rather than having farmers receive a part of their income from government payments in lieu of price increases. Wickard of course knew of this general opposition to subsidies in lieu of price increases but saw no other alternative in view of administration policy on price increases.

Although the commodities for which incentive payments were proposed were not those on which ceilings were kept down by the deduction of government payments, both the Farm Bureau and the agricultural congressmen strenuously objected to the use of government payments in lieu of price increases to get expanded acreages. . . . With the active support of the Farm Bureau, the Appropriations Committee turned down the Secretary's request for additional funds after the most perfunctory hearings (389, pp. 133-134).

Executive consideration demanded that the post of Food Administrator be occupied by some individual who could at the same time support the price policies of the administration and avoid an irreparable breach between the Executive and Congress. On March 25, 1943, the President announced the appointment of Chester Davis as Administrator of Food Production and Distribution within the Department of Agriculture, but directly responsible to the President or his deputy. The next day, by the terms of Executive Order 9322, all of the powers, functions, and duties conferred upon the Secretary by Executive Order 9280 were transferred to the Administrator.¹⁴ A separate Administration of Food Production and Distribution was created to include the Food Distribution Administration, the Federal Extension Service, the Commodity Credit Corporation, and all of the Food Production

Administration except the Farm Credit Administration. On March 29, Chester Davis took office as head of the new Administration and on April 19, by Executive Order 9334, it was officially named the War Food Administration. In addition, this Executive order clarified the relationship of the staff offices of the Secretary to the War Food Administrator. They were to serve both the Department and the War Food Administration. Davis remained in this difficult assignment only 3 months before resigning to return to the Federal Reserve Bank in St. Louis.

Administrative Developments Under Marvin Jones

On June 29, 1943, Marvin Jones was persuaded to accept the duties and responsibilities of Food Administrator (312, no. 2693-43). Because of his tremendous prestige with Congress as a former chairman of the House Agriculture Committee and his unswerving loyalty to the President, Jones was able to continue to discharge the responsibilities of his office for the duration of the war.

Meanwhile, several minor administrative changes were being made to clarify the position of the Food Administrator. At the same time, the War Food Administrator was designated as alternate to the Secretary of Agriculture on the Combined Food Board. The Secretary of Agriculture and the War Food Administrator were authorized to exercise any and all of each other's authority to the extent necessary to perform their respective duties and functions. This last provision was necessary because certain duties assigned by statute to the Secretary had been delegated by Executive order to the Food Administrator. On June 30, the War Food Administrator was designated a member of the War Mobilization Committee and of the War Production Board.¹⁵ The ability of Secretary Wickard and Food Administrator Jones to work together harmoniously under somewhat awkward administrative arrangements was a vital factor in the successful prosecution of the wartime food program.

On September 1, the National War Board of the War Food Administration was established. It was composed of agency heads formerly designated as members of the Department's War Board. The Board's principal function was defined as considering and recommending whether a given function should be administered through the State and county war boards or one or more of the constituent agencies represented on these boards.¹⁶ On October 29, 1943, major State and county war board functions were reassigned to the line agencies of the Department.¹⁷

The War Food Administrator reversed the administrative moves to consolidate the action agencies by making the Agricultural Adjustment Agency, the Farm Security Administration, and the Soil Conservation Service independent agencies within the War

Food Administration. The Food Production Administration was succeeded by the Office of Production, while the Food Distribution Administration became the Office of Distribution. The Office of Price was established as a staff office in the War Food Administration. These changes were made pursuant to War Food Administrator's Memorandum 27, Supplement 4, January 21, 1944. Two months later the Board of Directors of the Commodity Credit Corporation was reconstituted to include the Directors of Distribution, Price, and Production as Board members reporting directly to the War Food Administrator as Chairman of the Board. The Director of Distribution was elected Vice President of the Corporation.¹⁸

A further reorganization on January 1, 1945, abolished the Office of Production and the Office of Distribution. The Office of Basic Commodities, the Office of Supply, and the Office of Marketing Services were established. The first two offices and part of the Office of Marketing Services were made a part of the Commodity Credit Corporation on the same date.¹⁹

The Secretary's and, subsequently, the War Food Administrator's rather tenuous powers over foreign purchases of food under Executive Order 9280 were clarified and restricted by Executive Order 9385, October 6, 1943.²⁰ The Foreign Economic Administration took over all responsibilities for foreign food purchases except for sugar produced in the Caribbean areas and food, machinery, and other food facilities procured from Canada. Pursuant to this order, personnel of the Foreign Commodities Division of the Commodity Credit Corporation and all of its representatives abroad were transferred to the Foreign Economic Administration. A memorandum of understanding between the War Food Administration and the Foreign Economic Administration was signed on July 19, 1944. These agencies agreed that (1) the Foreign Economic Administration should have United States responsibility for determination of requirements as between foreign countries, as well as production, purchase, and distribution of food from foreign sources; and (2) it was to serve as sole claimant before the War Food Administration for domestic food for foreign use.²¹

Food Will Win the War and Write the Peace

Food Production Programs, 1943-1945

Food production increases in the United States in 1941 and 1942 had been tremendous, and by the summer of 1943 it appeared that the production for 1943 would break the records of preceding

years. In planning production goals for 1944, the prospect for further significant increases was not encouraging—surplus labor had been absorbed by expanding production, industry, and the Armed Forces; grain carryovers had been largely consumed in the feeding of livestock and industrial uses; and machinery was in short supply. In the formulation of the 1944 goals, the nutrition research which had been carried on in the Department all through the thirties was, for the first time, seriously applied in planning production. In 1943, a study had been completed in the Bureau of Agricultural Economics and the Bureau of Human Nutrition and Home Economics of the nutritional efficiency of various feeds, crops, and livestock. This study indicated that certain changes in American production and consumption habits would result in more efficient overall use of the production capacity of American agriculture (358, p. 18).

In evaluating this study, it was necessary to forecast the extent to which farmers could and would shift production patterns and the degree to which consumers would accept dietary changes. It was indicated, for example, that dry skim milk might provide essential nutrients more efficiently than pork chops, poultry, or eggs if farmers could be persuaded to market their skim milk rather than to feed it to their livestock, and if consumers could be persuaded to use it. Though milk production had been increased in 1942 and 1943 by 15 percent over the 1935–39 average, production had not met the goals in these years. Both the labor and feed shortages were limiting factors in probable production in 1944. Despite this, goals for milk were raised in 1944 because of the great demand and the efficiency of cows in converting feed into high-quality protein food. High goals for oilseed crops were set despite poor yields in 1943 and other production problems, because they not only produced much needed oil but high-quality protein feed for livestock. Even though the goals for oilseed crops were not reached in the later years of the war, the greatest increase in acreage and production during the war years was in oilseed crops, with soybean production averaging 340 percent of the prewar average.

By 1944, when goals for 1945 were being contemplated, practically all production restrictions had been removed. The 1945 production program as announced on November 15, 1944, suggested about the same acreages as were planted in 1944 (312, no. 3576–44).

Adapting Action Programs to Wartime Objectives

The adaptation of the conservation and adjustment machinery of the Department to the promotion of increased production, primarily of selected wartime crops, had been begun in 1941 and 1942. In these years, farmers had been encouraged to plant war

crops by the relaxation of penalties for exceeding acreage allotments, provided the excess acreage was planted to war crops (312, nos. 2606-41, 2534-41, 2181-41, 1993-41). Beginning with the 1943 program, the Agricultural Adjustment Agency made crop payments to farmers conditional upon the degree to which goals for war crops were met. Deductions of \$15 per acre in adjustment payments were made for failure to plant at least 90 percent of the acreage allotment and 90 percent of a special war crop goal, following policy announced in December 1942 (312, nos. 1053-43, 1086-43). On January 8, 1943, it was announced that farmers in the commercial corn area would be permitted to overplant their corn allotments without penalty provided they had planted their goal of war crops (312, no. 1298-43). Loans were to be offered in 1943 only to corn producers who had met their war crop goals. In January 1943, the Department announced an increase in the goals for certain crops and a production payment program designed to encourage the production of potatoes, dry beans, and fresh truck crops (312, no. 1374-43). Later in the same month the Secretary announced a program of incentive payments for farmers who produced in excess of 90 percent and up to 100 percent of their goals (312, no. 1441-43). This was amended May 20, 1943, to provide payments only for potatoes and commercial truck crops for fresh consumption, because Congress failed to appropriate funds for the broader program.²²

Commodity by commodity, during 1943 and 1944, the acreage allotments and marketing quotas for wheat, corn, peanuts, soybeans, cotton, and certain types of tobacco were suspended.²³ By changing the definitions of soil-depleting and soil-conserving crops, the Department was able to continue to make some agricultural conservation payments to farmers throughout the war period. For example, peanuts which were hogged off were classified as a soil-building crop (312, no. 2606-41), cotton of a staple length of more than 1½ inches was not classified as cotton, and wheat and cotton acreage allotments planted to war crops were considered to have been planted to wheat and cotton for purposes of determining agricultural adjustment and soil conservation payments.²⁴ Thus, the adjustment machinery of the depressed thirties was able to promote increased production to meet the new conditions of the forties.

Providing Production Tools

Feed for Livestock

To encourage the increased production of livestock and dairy products, the Department adopted a program to provide plentiful supplies of feed grains for livestock and dairy farms at reason-

able prices. Starting late in 1941, Government-owned stocks of corn were sold at 85 percent of parity, plus carrying charges. On August 6, 1942, the Department announced that 125 million bushels of wheat would be sold for feed at 85 percent of the parity price for corn, pursuant to the authorization of such sale by Congress (312, no. 267-43).

The sale of an additional 100 million bushels of wheat for feed at the parity price of corn was authorized by Congress on March 25, 1943.²⁵ The sale of additional wheat for feed at this price was authorized June 16, 1943 (312, no. 2595-43). The program was continued through 1944 and, as domestic stocks became depleted, feed wheat was imported from Canada. Price ceilings first imposed on corn on January 13, 1943, were revised upward in April and again on December 4, 1943, at which time ceilings were also established on oats, barley, and grain sorghums at prices which reflected full parity (312, no. 1135-44). Soft wheat, used primarily for bread flour, was placed under ceiling prices on November 19, 1943, and all wheat on January 4, 1944, at prices which reflected full parity (256, p. 6). Because of the shortage of feed grains, a program for the importation of Argentine corn was inaugurated on June 2, 1944 (255, p. 12). Meanwhile, it had become difficult for dairy farmers, poultry producers, and livestock producers outside of the Corn Belt to buy adequate supplies of feed to maintain production. Various remedial measures were put into effect, such as price differentials, production payment programs, feed subsidies, regulation of mixed feed production, and Government requisitioning of elevator stocks and market supplies²⁶ (312, nos. 2662-43, 653-44, 1135-44, 1766-44, 1981-44, 2133-44).

Farm Machinery

Before the end of the first year of war, the War Production Board placed severe restrictions on the use of scarce raw materials such as steel and rubber for other than direct military needs. Fortunately, farmers were reasonably well provided with farm machinery, most of it in good condition and of relatively recent models. Production and sales of farm machinery had been large in 1940 and 1941. The farm machinery program for 1942 had provided roughly 80 percent as much new farm machinery and 150 percent as many spare parts as had been produced in the preceding year. The Extension Service took the lead in a campaign to get farmers to repair machinery on farms, to take better care of machinery, and to collect scrap iron and turn it in for salvage (304, 1942, pp. 130-131).

By the fall of 1942, it became necessary to institute the rationing of farm machinery. The authority for this was delegated to the Department by the Office of Price Administration on September

15, 1942.²⁷ The program formulated by the Department delegated the responsibility to committees of the State and county war boards (306, no. 975-26). For 1943 the War Production Board proposed the allocation of only 23 percent as much steel to the production of farm machinery as was used in 1940.²⁸ Vigorous protests by the Secretary succeeded in getting the allocation raised to 40 percent of 1940. However, it appeared in March 1943 that this allocation might not be fulfilled, as steel mills were far behind in their deliveries of allocated steel (389, p. 55).

In the spring of 1943 the war boards conducted a farm-by-farm survey of machinery needs (283, 1944, p. 709). By this time, the increasing scarcity of farm labor made the need for increased labor-saving machinery urgent. The War Production Board approved a program for the unlimited manufacture of spare parts and 80 percent as much new machinery as had been produced in 1940 (304, 1943, pp. 108-110). For 1944 the allocation was raised to 100 percent of 1940 (304, 1944, p. 55). Production of labor-saving harvesting machinery and milking machines was emphasized. Farmers were encouraged to pool machinery and do custom work with their equipment.

Rationing of farm machinery was discontinued on November 21, 1944.²⁹ The farm machinery program helped greatly in getting increased acreages of crops grown and harvested. While the inter-war period had seen the mechanization of planting and cultivating operations, during the war great progress was made in the mechanization of harvesting operations.

Fertilizers and Insecticides

The production and sale of fertilizers increased greatly during the war years. One factor in keeping up the available supply of nitrogenous fertilizers was the strategic need to assist in stabilizing the economy of Chile, an important exporter of nitrate of soda. Another was that the expansion of the chemical industry to fill military requirements produced byproducts which could be used advantageously in the manufacture of superphosphates and chemical nitrogen for fertilizers. Although the supply of fertilizer increased, the agricultural production program created such a strong demand that on September 12, 1942, it became necessary for the War Production Board to allocate chemical nitrogen to fertilizer companies in 1942 and to standardize the plant food content of mixed fertilizers. The need to save transportation space resulted in a reduction of the amount of filler used in mixed fertilizers. The use of nitrogen fertilizers for nonfarm purposes was forbidden. The order was amended on December 4, 1942.

A few weeks later, after allocation and control of fertilizers had been transferred to the Department, Food Production Order 5 was

issued.³⁰ It established a system of priorities for essential war food and fiber crops. These measures insured an adequate supply of fertilizer for commercial vegetables, truck crops, potatoes, peanuts, soybeans, flax, hemp, castor beans, and seeds, and large quantities were made available for other crops. Overall fertilizer consumption increased 50 percent for the country as a whole, and rose by more than 350 percent in the North Central States (389, p. 54).

During the war, supplies of pyrethrins and rotenone were greatly reduced and military demands for these insecticides made insecticides strategic and critical materials from the outbreak of hostilities. The experience of the Bureau of Entomology and Plant Quarantine in detecting and eradicating insect infestations before they could spread proved to be invaluable in enabling the Government to make the best possible use of the limited supplies available. In cooperation first with the War Production Board and later with the War Food Administration, the Bureau certified the areas most in need of shipments of insecticides and the type needed on a week-to-week basis. Thus, though there was no rationing of pesticides, distribution was closely controlled and serious outbreaks were avoided (389, p. 57).

Farm Labor

The Department had had a farm labor program during the thirties. Under the jurisdiction of the Farm Security Administration, migratory labor camps providing minimum standards for housing and health had been built in areas where large numbers of laborers were required for harvesting crops, such as commercial fruit and vegetable producing areas. During the defense period the employment opportunities and high wages in industry siphoned off much of the surplus farm labor. Large numbers of farm boys were drafted into the army. By 1942 farm labor was becoming scarce. The Tydings amendment of November 13, 1942, to the Selective Service Act made mandatory the deferment of farmworkers "necessary to and regularly engaged in an agricultural occupation." This stopped the drift of draft-age farm labor to industrial employment and kept about 1,600,000 able-bodied young men on the farms.³¹

Meanwhile, the responsibilities of the Department for agricultural labor gradually increased. On June 22, 1942, the War Manpower Commission directed the Department to take appropriate action to insure that needed nonlocal agricultural workers were provided transportation facilities and health and welfare services.³² On November 6, 1942, the War Manpower Commission assigned the Department certain responsibilities for providing information required for farm deferments and for easing labor shortages on poultry, livestock, and dairy farms.³³ The Director

of Economic Stabilization on November 30, 1942, placed a ceiling of \$2,400 on agricultural wage increases and empowered the Secretary to establish local ceilings at lower levels.³⁴ On January 23, 1943, a War Manpower Commission directive transferred from the United States Employment Service to the Department of Agriculture the responsibility for recruiting, placing, transferring, and utilizing agricultural workers.³⁵

Work on farm labor was being carried on in several agencies within the Department. The Bureau of Agricultural Economics intensified the work of collecting information on the demand for farm labor and its supply, and the Farm Security Administration's responsibilities were expanded by the addition of a program for recruiting and transporting farm laborers. State and local land use planning committees were directed to set up farm labor subcommittees. The Federal Extension Service helped to provide training for farm labor. The Office of Agricultural Defense Relations was responsible for coordination of Department programs with those of outside agencies, while the departmental committee on farm labor was responsible for coordination of work in the different bureaus within the Department.

Subsequent to the reorganization of December 1942, the Food Production Administration and the Food Distribution Administration organized labor branches, but on March 1, 1943, the Secretary created the Agricultural Labor Administration (*306, no. 1075*). The Director was given policy and procedural supervision over all labor functions of the Department. One month later, after the establishment of the War Food Administration, the position of Deputy Administrator for Farm Labor was established and Col. Jay L. Taylor was appointed to this post (*312, no. 2018-43*). He was succeeded on June 21, 1943, by Col. Philip G. Bruton, who carried the responsibility for the War Food Administration labor program until May 24, 1944.³⁶ His title was changed to Director of Labor on September 24, 1943. The Director of Labor was assisted by the Director of the Extension Service.

Since the appropriation of funds for the farm labor program under Public Law 45, April 29, 1943, and subsequent legislation had apportioned about half of the total funds to the States for expenditure by the State extension services, the War Food Administrator on May 24, 1944, formally divided responsibility for labor functions between the Office of Labor and the Extension Service. The Office of Labor was assigned responsibility for the program of recruiting, transporting, housing, and caring for the health of labor imported from Mexico, the Bahama Islands, Jamaica, Barbados, British Honduras, Canada, and Newfoundland as well as interstate migratory labor.³⁷ The first of these international agreements set the precedent with regard to wage, housing, and health guarantees and protection from discrimination. This was the agreement with Mexico negotiated by Secretary Wickard and effective on August 4, 1942.³⁸ The Office of Labor built and oper-

ated labor camps and carried on feeding programs. It carried on negotiations with the War Department for the use of prisoners of war as agricultural workers.

The Federal and State extension services were responsible for all intrastate agricultural labor including the Women's Land Army and the Victory Farm Volunteers. Although by definition the Women's Land Army included all women working on farms, the action program was one of recruiting women from villages, towns, and even cities for year-round, seasonal, or emergency short-term assignments on farms. The program varied from State to State, partly in relation to the type of agriculture, partly in relation to the acuteness of the need for labor, and partly in relation to local attitudes toward nonfarm women doing farm work. They were particularly useful in harvesting fruit and vegetable crops.

The Victory Farm Volunteers program was primarily for the Nation's youth; it employed high school and college students during summer vacations. In some areas, vacation periods were adjusted to coincide with periods of greatest need for seasonal labor. Both programs were decentralized, with the Federal extension office serving in an advisory and coordinating capacity.

The Extension Service also carried on training programs for inexperienced farm labor, work leaders for labor crews, and farmers, to improve employer-employee relations and to increase the efficiency of labor utilization. The Extension Service operated a farm labor placement service and was responsible for determining the number of laborers needed and the date and approximate duration of the needs.

The responsibility for the agricultural wage stabilization program of the Department was delegated by the War Food Administrator to the Office of Labor.³⁹ Originally, a primary objective was to allow agricultural wage rates to rise until some of the inequities between agricultural and industrial wages had been corrected. The average wage rates for agricultural workers in the United States as a whole did increase 274 percent between 1939 and 1945. However, it was soon discovered that rapidly increasing wage rates were increasing production costs so that pressure for the raising of ceiling prices of food was being generated. Consequently, on April 12, 1943, an order promulgating maximum wage rates for harvesting asparagus in four California counties was issued. This was the first specific wage-ceiling order.⁴⁰ A total of 96 such orders was eventually issued. Stabilization of wages had the very beneficial effect of decreasing labor turnover during the wartime emergency. Since producers could no longer bid against one another for scarce labor, labor pirating was reduced. Since labor could not gain from shopping around, labor turnover decreased.

Close cooperation between the Extension Service and the Office of Labor resulted in a wartime labor program which was regarded as successful despite the overall shortage of labor (179).

Prices as Production Incentives

Price ceilings began to exert a limiting influence on production as the prices of more and more agricultural commodities reached parity (389, pp. 139-142, 189-190, 253-254; 265, pp. 252-254; 27, pp. 299-303; 26, pp. 423-430; 373, p. 16). By the end of 1943, almost all commodities had reached parity. On April 8, 1943, President Roosevelt issued the "Hold the Line" order on prices. He directed Government agencies to safeguard the stabilization of prices, wages, and salaries on the basis of levels existing on September 15, 1942. The order authorized "support prices, subsidies, or other inducements as may be authorized by law and deemed necessary to maintain or increase production."⁴¹ To maintain price ceilings at September 1942 levels without reducing prices to producers, it was necessary to develop a price stabilization program. In reporting the food program for 1944, Food Administrator Jones said that stabilization programs were in effect for feed, milk, bread, canned vegetables, dry beans, cheese, vegetable oils, potatoes and sweetpotatoes, coffee, offshore sugar, domestic sugar, prunes and raisins, meat, butter, and some canned and fresh fruits (358, pp. 23-25).

Three main types of price stabilization operations were established. First, the Government as the sole purchasing agent bought from the producers at the legal support price and resold to processors at prices which enabled them to sell the finished product at ceiling prices. An example of this type was the purchase of peanuts for oil in 1943 and later. Second, direct processor payments of a stated amount per unit of production were made, such as the payment to processors of fruits and vegetables to offset increased processing costs. Third, the Government purchased processed commodities from the processor at one price and resold to the same processor at a lower figure, as was done with cheddar cheese. Price stabilization operations were carried out by the Commodity Credit Corporation and the Reconstruction Finance Corporation. The latter operated through a subsidiary, the Defense Supplies Corporation.

Credit

For most farmers, the expansion of agricultural output, and particularly conversion to new crops to meet war needs, entailed increased financial outlays. This gave rise to increasing demand by farmers for the type of credit provided by their production credit associations supervised by the Farm Credit Administration. The increased business of the production credit associations enabled them to build up a greater net worth. They began cam-

paigms to sell class A (nonvoting) stock beyond that required by law so they could repay their Government-owned stock. The first association finished the job of repaying its Government-owned stock by 1945.

The regional agricultural credit corporations were reactivated by Secretary Wickard in January 1943 as an additional source of production credit.

The Farm Security Administration continued to provide supervised credit for its clients among the small farmers, and in addition made Food for Freedom production loans of up to \$500 to low-income farmers who were not Farm Security clients.

Education and Information

The Department's reputation for excellent educational work dates back to World War I, when Herbert Hoover described it as "the world's greatest educational institution." Its full facilities were turned toward an educational campaign to promote food production. The Federal-State extension services, with a county agent in almost every agricultural county in the United States, were the first educational agencies set up by the Department to deal directly with farmers. The field staffs of the Agricultural Adjustment Administration, the Soil Conservation Service, the Farm Security Administration, and other agencies supplemented the Extension Service with aid in reaching farmers with the latest scientific information and helping them to see their relationship to the total wartime production program. The Office of Information supplied field services with printed materials and visual aids. The contributions of these educational services in stimulating farmers to make shifts in production, often with personal and financial sacrifices, and to maximize production cannot be quantitatively assessed, but the magnificent overall wartime record of American farmers is a testimonial to their effectiveness.

Wartime transportation shortages greatly accelerated the trend toward the use of mass media for information purposes. Shortages of gasoline and tires prevented county agricultural and home demonstration agents from scheduling as many meetings to disseminate information as in previous years. Newspaper and magazine articles and radio talks replaced many community meetings. These naturally reached town, city, and suburban families as well as farm families. As a part of the War Food Administration, the Extension Service was given the responsibility for educational programs dealing with food distribution and conservation as well as food production. With the wartime emphasis on nutrition, food conservation, price ceilings, and rationing, not to mention victory gardens, urban families became regular audiences for extension-sponsored information.

Miscellaneous Food Production and Conservation Programs

To take some of the pressure off commercial supplies, the victory garden program was inaugurated. It began to take shape in 1941, and in December of that year the Department, in cooperation with the Office of Defense Health and Welfare Services, held a national garden conference to launch the program. Both farm and city families were urged to cultivate home gardens. Special information programs were carried on a continuing basis by the press and radio. The Extension Service gave added emphasis to gardening. Special programs were undertaken to provide seed, fertilizer, and simple gardening tools for victory gardens. Business, industry, and local governments cooperated to provide space for community garden projects in urban areas. An estimated 15 million families planted victory gardens in 1942, and in 1943 some 20 million victory gardens produced more than 40 percent of the vegetables grown for fresh consumption that year. Production from this source continued at high levels in 1944 and 1945. The victory garden program was one of the most popular of any developed in the war period (*304, 1942, pp. 67-69; 358, pp. 21-22*).

One further method of increasing the available food supplies was the elimination of waste. A program of household salvage of fats and greases was begun on July 13, 1942, and beginning December 13, 1943, the Office of Price Administration permitted retail butchers to give ration stamps in addition to the price payment to any individual who turned in waste fats. Collections of waste fats and greases from civilian and military sources was estimated at 42 million pounds in 1942, 161 million pounds in 1943, 220 million pounds in 1944, and 177 million pounds in 1945 (*373, pp. 11-12*).

A plan for obtaining increased animal fat production in packing plants was not put into effect because of relative price ceilings, shortage of skilled labor in packing plants, increased danger of meat loss from spoilage, lack of rendering machinery, and opposition of renderers (*358, p. 47*).

The Quartermaster Corps made a study of food acceptance in army messhalls, and menus were revised to include fewer unpopular foods and to serve them less frequently (*304, 1943, p. 11*). Civilians were urged to preserve both surpluses of victory gardens and those of local market commercial fruits and vegetables. Closures for canning jars and special sugar rations were made available. Research showed that vegetable processing wastes, particularly from broccoli, could be dehydrated for high-quality livestock feed (*247, p. 17*).

From the Farm to the Table

Food Distribution

The many years of Department experience in collecting information on food production and in related policy formulation and administration were paralleled to only a limited extent in aspects of marketing. As the war emergency developed, it soon became evident, however, that marketing would play a large part in decision making when price ceilings and price floors virtually eliminated normal price fluctuations and demand for many foods exceeded supply at ceiling prices.

Requirements and Allocations

The claimants for a share in the American food supply included the military forces and civilian workers of our Allies, some neutral countries whose normal sources of staple foods had been cut off by the war, and populations of territory occupied by Allied military forces, as well as American military forces and civilians. The Combined Food Board was established on June 9, 1942, as the successor to the Anglo-American Food Committee, to facilitate co-operation on a worldwide basis in assessing food supplies, requirements and allocations, and to make recommendations. After Executive Order 9280 had transferred the food functions of the War Production Board to the Department of Agriculture, the Foods Requirements Committee of the War Production Board was replaced, on December 19, 1942, by the Food Advisory Committee to the Secretary of Agriculture (312, no. 1179-43). This committee later became advisory to the War Food Administrator. Its membership included representatives of the various United States agencies having claims to a share of United States food supplies. On January 16, 1943, the Interagency Allocations Committee was established with the Director of Food Distribution of the War Food Administration as its chairman. Specialists from the Department of Agriculture and some personnel transferred from the War Production Board were assigned to Requirements and Allocations of the Food Distribution Administration.

Roy F. Hendrickson, Director of Food Distribution from December 1942 until January 1944, described the procedures in requirements and allocations as the system was functioning in 1943:

1. First, each claimant files his request for some part of the United States supplies. Civilians are represented by a specific group, the Civilian Requirements Branch of the Food Distribution Administration, which submits figures indicating what civilians require. The Army, Navy, Marine Corps, War Shipping Administration, and Vet-

erans Administration file their requests. The United Kingdom, Soviet Russia, the French, and other United Nations submit their requirements. The Red Cross, Hawaii, Puerto Rico, and Alaska each lists its needs through appropriate representatives. The Office of Foreign Relief and Rehabilitation files its claims. The State Department and the Office of Economic Warfare supply information on the needs for Latin America and other friendly nations.

2. The second stage is to compare these requests with available supplies. Commodity specialists and production experts maintain detailed information on stocks, annual production, distribution, and estimated production. Frequently, when they compare the requests with the amount available, they find there is not enough to meet all of the initial requests in full. Each claimant is asked to justify his claims. Possibilities of substitution are examined. Foreign resources are reviewed.

After the commodity specialists have provided detailed information, the matter is reviewed by the Inter-Agency Allocation Committee. . . . Lend-Lease officials in the Office of Foreign Economic Administration under Leo T. Crowley, advise in regard to the areas obtaining Lend-Lease assistance. At the same time the allocation for foreign use is also studied by designated United States representatives, working with official representatives of the United Kingdom. This is reviewed before the Combined Food Board. . . . Finally, but speedily, a balance is struck and adjustments are made. Then the Food Distribution Director's recommendations are reviewed by the Food Advisory Committee. . . . The War Food Administrator, in acting on the recommendations, finally determines exactly how each United States food commodity shall be distributed. To meet changing circumstances and permit necessary flexibility, the allocations are reviewed and adjusted once every 3 months and are at the same time projected a full year ahead. More tentative requirements are developed for 2 years ahead as a guide to production planning.

3. With these decisions made, the entire distribution process is implemented. . . . The Government buys in accordance with the allocation, for military and other non-civilian uses or for special programs (103, pp. 36-37).

Though changes were made from time to time in the various boards, committees, and agencies named in this account, the basic procedure for ascertaining requirements and making allocations remained the same for the duration of the war.

The tools used by the Department to carry out the allocations were administrative orders and Government purchases. Administrative orders, issued under the authority delegated by the President to the Department, were binding with the force of law on whatever segment of the food industry was involved. From the transfer of responsibility for allocations to the Department on December 5, 1942, until April 20, 1944, they were issued as numbered Food Distribution Orders. Subsequently, the designation War Food Order was adopted for all orders, regulations, and directives, whether they affected production or distribution, issued by the War Food Administration.

The channeling of raw farm products into the manufacture of goods which were most essential, and away from less essential uses, was accomplished by orders restricting inventories and purchases of raw materials by processors, orders requiring the sale

of raw materials to only certain types of processors, orders prescribing the formulas to be used in the manufacture of certain commodities, and orders restricting the production of certain commodities. The use of such orders in regulating the manufacture of products from peanuts, soybeans, and cottonseed—all edible domestic oilseeds—provides a good illustration of how the system worked. Fats and oils became critical as soon as Japan cut off American imports from the Pacific. The Office of Price Administration, on December 13, 1941, placed ceiling prices on fats and oils.⁴² The War Production Board, on December 29, 1941, issued an order restricting the size of inventories carried by manufacturing firms and restricting the use of fats and oils. This was War Production Board General Order M-71.⁴³

The War Production Board delegated allocation authority over soybeans and products therefrom to the Commodity Credit Corporation, effective October 1, 1942, about 2 months before Executive Order 9280 transferred allocation authority over other foods, including fats and oils, to the Department.⁴⁴ On March 31, 1943, the Department issued Food Distribution Order 42, which established restrictions on manufacture, use, consumption, processing, and inventories of all fats and oils, and prohibited certain uses of specified fats and oils. This order superseded War Production Board Order M-71. It continued the quota system for the use of fats and oils based on a percentage of 1940-41 usage, but exempted products manufactured for the use of the military forces and the Allies from quota restrictions.

During the next 2 years, until July 1, 1945, this order was amended 16 times. Most of these amendments involved reductions in quotas, as military and industrial demands for fats and oils continued to increase. To insure that oilseed crops moved into trade channels in which they would be processed into oil, orders were issued annually for each of the three crops, soybeans, cottonseed, and peanuts. Only processors having contracts with the Commodity Credit Corporation were privileged to buy soybeans and cottonseed. In the early part of the war, crushing facilities in the Midwest were inadequate to handle the large increase in the production of soybeans, therefore part of the crop was shipped to crushing mills in the South and on the Pacific coast.

Peanuts were handled somewhat differently from other oil-producing crops. A large proportion of peanut production was customarily consumed as peanuts and peanut butter, or in peanut candy. Before the war, only peanuts that could not be marketed for these uses under the agricultural adjustment program had been crushed for oil, and these were sold at a lower price than other peanuts. This differential pricing was abandoned in the 1943 crop year, and the Commodity Credit Corporation was established as the sole purchaser of peanuts. Peanuts for crushing were resold by the Commodity Credit Corporation to crushers at a price consistent with the established ceiling price for peanut oil. But consumer

demand for peanuts, both civilian and military, expanded so greatly that it became necessary to restrict the processing of peanuts for nuts and for peanut butter. A series of orders effecting this change was issued, the first of which was dated June 11, 1943.

The high-protein meals produced when the oil had been removed from oilseed crops could be used in fertilizers, livestock feeds, or certain industrial products. As livestock numbers mounted and feed grain supplies diminished, it became necessary to channel these meals away from fertilizer into livestock feeds. The first of these orders became effective August 1, 1943.⁴⁵ Use of edible oil in the manufacture of soap had been continuously and increasingly restricted since the original War Production Board Order M-71. On November 1, 1943, formulas for soaps were prescribed in order to provide additional supplies of soap without using more fats and oils.

Food products acquired for other than United States civilian use were virtually all purchased by the Government, then resold to claimant agencies. The Department, acting through the Commodity Credit Corporation and the Defense Supplies Corporation, was the chief Government purchaser, though the United States Armed Forces continued to buy independently. Processors were required by administrative orders to set aside part, and in some cases all, of their production for Government purchase. The entire production of raisins, citrus juices, dry whole eggs, and dehydrated vegetables and soups was set aside for Government purchase. Quotas in terms of a percentage of production of Government-inspected meats, dry milk, rice, dry beans and peas, and numerous other foods were ordered set aside. This system was in use from the beginning of 1943 until the end of the war. Quotas were temporarily suspended when stocks were ample.

Food Rationing

When the supply of a commodity allocated to United States civilians for consumption was not sufficient to supply the demand at ceiling prices, rationing was necessary to insure equitable distribution. Authority over food rationing was delegated to the Department by Executive Order 9280 which stated that—

The Secretary . . . shall, through the Office of Price Administration, exercise the priorities and allocation powers conferred upon him by this Executive Order for civilian rationing. . . . The Secretary, before determining the time, extent, and other conditions of civilian rationing, shall consult with the Price Administrator.⁴⁶

Prior to December 5, 1942, all rationing power had been vested in the Office of Price Administration and that Office had already started the rationing of two foods—sugar on April 20, 1942, and coffee on November 29, 1942. By the fall of 1942, both the Department of Agriculture and the Office of Price Administration

agreed that processed foods, fats and oils, and meats should be rationed as soon as possible. A memorandum of understanding signed by the Department and the Office of Price Administration on December 11 paved the way for public announcement that processed food would be rationed (265, p. 354).

The Secretary issued Food Directive 1 on January 16, 1943. It delegated authority to ration processed foods to the Office of Price Administration, effective immediately.⁴⁷ This was superseded by Food Directive 5 on February 20, 1943. The rationing of processed fruits and vegetables under the point system was started on March 1, 1943. On March 20, Food Directive 6 delegated authority for rationing fats and oils and cheese to the Office of Price Administration, and Food Directive 7 delegated authority for rationing meats.⁴⁸

Rationing of all of these foods began on March 29, 1943, using a point system similar to that used for processed fruits and vegetables (143, p. 167). Point values of various foods were adjusted upward or downward periodically as available supplies changed. Decisions regarding the desirable levels of point values were made in consultation between Department specialists and Office of Price Administration specialists. Evaporated milk, condensed milk, cream cheese, and a few other products were added to the list of rationed foods at later dates.

Processing

Most foods require processing before they are ready for consumers. Wartime conditions greatly increased the demand for processed foods of all sorts because the Armed Forces of both the United States and the Allies, and civilian populations abroad, required foods that could be stored and shipped without spoilage in the most concentrated forms practicable. Both farmers and the food trade had to cope with labor, container, and machinery shortages, and sometimes shortages of essential ingredients of the processed product.

The War Food Administration, following a procedure initiated by the War Production Board, continued to use national industry advisory committees for guidance on joint problems faced by Government and industry. Over 100 such committees were functioning by the end of 1944. They served in an advisory capacity in supplying information and making recommendations. Food orders were usually submitted to the appropriate committee in advance of clearance. The Food Administration assisted the industries in solving their problems of manpower, price squeezes, maintenance and repairs, operating supplies, and the construction of additional facilities. On behalf of the industry, it recommended priorities to the War Production Board (361, 1943, pp. 34-36).

While production of most farm products was at record levels during the war, shortage of materials and labor prevented expansion of warehouse facilities at a comparable rate. The grain storage problem, acute at the beginning of the war, was relieved from 1943 on as grain carryovers had been greatly reduced by increased livestock and poultry production. However, the tremendous stocks of processed foods held by the Government, or being held for Government purchase, made it necessary to utilize all available storage facilities even though, in some emergency cases, they did not meet Government standards. Priorities for frozen and refrigerated storage were issued by administrative order. The first of these orders, which prohibited the use of refrigerated storage space for semiperishable commodities, became effective August 3, 1943.⁴⁹ The Department inspected and supervised the storage of Government-owned food commodities and provided the best available storage, thus keeping food losses at a minimum.

Transportation

The Department had long been charged with the responsibility of representing farmers' interests in negotiating rates both with carriers directly and in hearings before the Interstate Commerce Commission. A 10-percent rate increase requested by the railroads early in 1942 was held to 3 percent for agricultural commodities after representations were made by the Department. The 3-percent increase was suspended from May 15 to December 31, 1943, upon the presentation of evidence by the Department that the railroads did not need the increased revenue and that the higher rates were seriously hampering food production and distribution (*361, 1943, pp. 40-41*). Special rates were later negotiated for special situations such as one that permitted the return of used crates and boxes to producing areas to conserve the supply of shipping containers.

Anticipation of possible bottlenecks in transportation led to active planning in this area in the Division of Transportation of the National Defense Advisory Commission early in 1941. The Office of Defense Transportation, authorized by Executive Order 8989, was established early in 1942. Soon after, the Department was asked to draw up a priority list applicable to the transcontinental movement of agricultural products.

To avert, if possible, the imposition of embargoes or priorities, the Department in 1943 embarked on a program of transportation conservation in cooperation with the Office of Defense Transportation, the Office of Price Administration, and the Association of American Railroads. Regulations required the full loading of boxcars, eliminated cross-hauls, and restricted the use of railway cars for storage. Restrictions were placed on diversions and the length of time cars could be held, and a campaign was conducted

to get shippers to load and unload cars promptly. Certain products that did not require refrigerator car protection were forced to move in boxcars. Car movements were watched and cars were allocated to meet needs (361, 1943, pp. 40-42; 1944, pp. 38-40).

Truck transportation was restricted from the beginning by shortages of tires and gasoline, and as time went on by the lack of replacements. Priorities on the use of trucks for the transportation of agricultural products and regulations concerning the distances traveled and number of deliveries made by trucks were developed. In 1944, the responsibility for the issuing of Certificates of War Necessity to farm vehicle operators was delegated to the Department. Administration of the program was assigned to the county war boards.

Close cooperation among agencies, advance planning, and constant watchfulness averted all transportation bottlenecks except a few temporary and local ones.

Planning for the Postwar Period

The general authorization for postwar planning was contained in Executive Order 8455, issued June 26, 1940. The order directed Government agencies to make plans on the basis of a 6-year projection for public works, and to submit these to the Bureau of the Budget and the National Resources Planning Board.⁵⁰ Even before this order was issued, an informal interdepartmental group had met to consider postwar economic problems and policies on May 27, 1940. Howard Tolley and Leslie Wheeler represented the Department of Agriculture. The concern of the Department was broader than the preparation of a reserve shelf of postwar projects to serve as an economic shock absorber. On May 31, 1941, the Secretary established the Interbureau Committee on Post-defense Activities under the direction of the Bureau of Agricultural Economics (306, no. 913). Roy I. Kimmel was the first chairman of this committee, which included representatives of most of the agencies in the Department. Kimmel was succeeded in August 1942 by Raymond C. Smith, who continued in this post for the duration of the war period. Nine regional committees, made up of field representatives of the various agencies of the Department, worked closely with the land-grant colleges, the State directors of extension, and State experiment station directors. Though progress in postwar planning was secondary to the prosecution of war-time programs, a great deal of research and planning was done in the ensuing 4 years. The general tone of the planning was set by the Secretary when he stated:

In some quarters there is a fear that a severe economic depression is inevitable when the defense effort ceases.

The Department of Agriculture does not share this pessimism. We believe the country need never go through a major economic depression again. . . . We believe it is possible to maintain a national income greater than ever before in the history of the Nation.

If we plan soundly and courageously, if we enlist the help of the greatest possible number of people in making these plans, we can build an economy which will offer everybody a fair chance for work and security (312, no. 1082-42).

The program was redirected somewhat away from an emphasis on a rural public works program toward long-range adjustments in agricultural production. At a conference of the Washington and regional committees in August 1942, it was agreed that one of the first jobs to be undertaken was an analysis of agricultural conditions at the end of the war. Not knowing just when the war would end, the group decided to make the analysis in terms of the situation prevailing at the end of the 1944 crop season to provide a benchmark for planning for the future. Three other basic assumptions were made: (1) That there would be a demobilization and foreign relief period starting with the defeat of Germany and running until long enough after the defeat of the second enemy to complete demobilization, reemployment, and emergency relief abroad; (2) that there would be a postwar prosperity period, running for several years after the completion of demobilization, until wartime shortages had been replaced, the backlog of consumer buying power diminished, and wartime devastation rebuilt; (3) that there would then follow a longtime postwar period of high prosperity or a period of economic stagnation and chronic unemployment.⁵¹

A conference of participants in agricultural postwar planning on all levels was held in Milwaukee, Wis., July 26-31, 1943. Reports of the various committees were circulated and discussed. The significant ideas developed up to this time included the thesis that agriculture should not expect to return to the prewar programs of production controls and restrictions, but should look toward continued expansion of production, especially of the more expensive "protective" foods for which an expanding population with a national income sufficient to provide a nutritionally adequate diet would provide a market (321). The small proportion of the total agricultural product which could not be marketed through normal trade channels without depressing prices, the committee anticipated, could be used in a revived food stamp plan and an expanded school lunch program. About this time it was decided that alternative planning to cover the possibility of economic maladjustment and extensive unemployment in industry should also be undertaken.⁵²

The cooperative medical care associations organized under the auspices of the Farm Security Administration for its borrowers were able, for the most part, to continue through the war despite the serious shortage of doctors in rural areas. In June 1945, more than 55,000 families were receiving one or more types of prepaid

health service through 743 units covering 1,048 counties (330, 1944-45, pp. 9-10). In 1942 the Department, acting through the Interbureau Committee on Postwar Programs, began experimental health programs in six selected rural counties under the supervision of the Farm Security Administration. These experimental plans differed from the Farm Security Administration plans in that membership was open to all farm families in the county, more adequate services were offered, average fees were higher, there was more supervision, and Federal funds were used to make up any differences between payments of the members and the total cost (330, 1943-44, pp. 12-13). Reports on rural health services from nearly all of the States were prepared as one of the activities of the Department's Interbureau Committee on Postwar Programs. In April 1944, a conference on medical care and health services for rural people was sponsored by the Farm Foundation. Representatives of farm organizations; medical, health, and hospital organizations; colleges and universities; and the Public Health Service participated along with representatives of the Federal Extension Service, the Bureau of Human Nutrition and Home Economics, the Farm Security Administration, and the Bureau of Agricultural Economics of the Department of Agriculture (74).

By 1945 rising land values were causing Department officials considerable anxiety. By the summer of 1945, the United States average of land values was 57 percent above that of 1935-39. The Secretary warned that—

Values are already beyond levels that are likely to be maintained by long-term farm earnings. . . . Educational and voluntary measures should not be expected to provide the control required to prevent further unwarranted advances in land prices. Perhaps it is time to consider remedial programs to alleviate difficulties that may arise in the postwar period (304, 1945, p. 65).

Throughout the period, the work on postwar problems was under the leadership of Secretary Wickard. By agreement with Marvin Jones, War Food Administrator, all agencies of the Department, including those in the War Food Administration, participated in this unified planning.⁵³ By the latter part of 1943, many Government agencies had embarked on postwar planning. It was coordinated through the Office of War Mobilization and the Budget Bureau. Meanwhile, in March 1943, the Senate established a special Committee on Post-War Economic Policy and Planning with Senator George of Georgia as chairman (271, Mar. 12, 1943). In January 1944, the House set up a similar committee with Representative Colmer of Mississippi as chairman (271, Jan. 26, 1944). Department and War Food Administration officials were invited to testify before these committees.

The military events of the latter part of 1943 gave rise to the hope that the war, at least in Europe, might be ended in 1944. Early in 1944 the military gave credence and impetus to this sentiment by reducing its demands for food, as well as for many kinds of war materials. The War Food Administration was holding

over 2 million tons of food worth over \$600 million. Warehouses were filled to capacity, and a new year's production would soon be on its way to market. Livestock marketings were particularly heavy because there was not enough feed to support all of the expansion in livestock numbers of the preceding 3 years. Most foods were rationed and the civilian population would consume much more than had been allocated. Consequently, it was decided that part of the huge Government stocks should be released through trade channels. The Office of Price Administration declared holidays on rationed foods in plentiful supply.

When the stockpiles had been decreased to manageable levels and the war in Europe was prolonged beyond the end of 1944 by the desperate German offensive in the Battle of the Bulge, most of the "point free" foods were returned to the rationed list. Unfavorable public reaction to the return to rationing and the lack of information on food needs for liberated areas made the continuation of rationing beyond the cessation of hostilities difficult if not impossible.

Short-Term Achievements and Long-Term Gains

The Department of Agriculture and the War Food Administration were justifiably proud of the food production achievements of World War II. Each year for 5 years, total food production was increased. In 1944, according to the Food Administration, food production was 38 percent above the 1935-39 average (*359, p. 10*). Increased production was mainly in foods most needed by the United States and its Allies. The acreage of oil-bearing seeds increased 42.6 percent; vegetables for processing, 91 percent. Meat production increased annually during the war years, reaching a peak of 24.6 billion pounds in 1944—over 50 percent above the 1935-39 average of 16.2 billion pounds—but it fell off 2 billion pounds in 1945 because reserve supplies of feed grains had been used up (*304, 1945, p. 43*). Milk production increased from an annual prewar average of 107.9 billion pounds to 123 billion pounds in 1945, but the supply available for human consumption was increased far more than this by the shift in marketing from farm-separated cream to whole milk. Wholesale deliveries of whole milk by farmers in 1945 were more than 55 percent above prewar. Production of poultry and eggs was expanded greatly in 1942, 1943, and 1944, but reduced in 1945 by feed shortages (*304, 1945, pp. 41-49*).

Though the percentage of total United States food consumed by United States civilians dropped from 97 percent in 1935-39 to 77

percent in 1945, the per capita consumption of food by civilians was greater throughout the war period than prewar. Nearly all of the increase was in so-called "protective foods"—dairy products, meats, poultry, fish, eggs, beans, peas, nuts, and vegetables (358, p. 5). The United States had the best-fed Army and Navy that the world had ever seen, and enough food was shipped to our Allies to keep up their fighting strength.

As a result of rising prices and farm income, farmers found it much easier to handle their debts. The Federal land banks, supervised by the Farm Credit Administration, not only urged farmers to pay off their loans as rapidly as possible but instituted the future-payment fund under which farmers in years of good incomes could set aside with the banks the funds to make payments in future low-income years. A high percentage of production loans were repaid on time and in full. This was in accord with the administration policy of curbing inflation by draining off surplus purchasing power. The period 1940–44 saw less borrowing and more debt paying by farmers than did the World War I years. By the end of the 1945 fiscal year, the farm mortgage debt was the lowest since 1916. Farmers' holdings of war bonds, bank deposits, and currency increased from an estimated \$5 billion on January 1, 1940, to nearly \$17 billion on January 1, 1945.

The credit agencies serving farmers under the supervision of the Farm Credit Administration were able to achieve sound financial positions. The Federal land banks were able to wipe out their stock impairment, finance their administrative expenses out of income, and carry on a program of repaying the \$125 million of stock Congress had provided in 1932. The Production Credit System, the Federal intermediate credit banks, and the banks for cooperatives reported similarly sound financial positions. In those types of farm credit which were in liquidation—land bank commissioner loans, the joint stock land bank loans, and some loans of the regional agricultural credit corporations—practically all of the Government's investment was being returned to the Treasury or transferred unimpaired to other loan agencies.

The practical application of nutrition research findings marked one of the greatest long-term gains of the war period. The value of nutrition research had become recognized in the Department when Louise Stanley was directing it in the Bureau of Home Economics early in the 1930's. Combating "hidden hunger" had been considered along with surplus disposal in the formulation of the prewar food stamp plan and school lunch program. The National Nutrition Conference held in May 1941, and sponsored by the National Research Council, focused attention on the importance of continuous research on food consumption and dietary levels. For this conference the Bureau of Home Economics supplied data showing that an appalling number of families in the United States had been living on diets below the safety line. The Bureau had

already become widely known for its food budgets for families of various income levels (304, 1941, pp. 67-69).

Following the recommendations of the nutrition conference, the Department launched a national campaign to improve the dietary level of American families. It is impossible to assess whether consumer education or fatter paychecks contributed in greater degree to improved nutrition in this country during the war years, but the figures demonstrate clearly that dietary levels did improve significantly. As already mentioned, the nutritive value of various foods as established by Bureau of Home Economics research became an important consideration in the development of goals for agricultural production during the war years. Nutrition requirement figures compiled by the Bureau of Home Economics and the Bureau of Agricultural Economics were used by the Army and Navy in planning menus, in deciding on the composition of field rations, and in ascertaining the requirements of food for military needs. As food shortages developed, the relative nutritional values of alternative foods became important considerations. Dietary requirements were used in ascertaining civilian food requirements when total food supplies were not adequate to meet all demands (358, p. 6).

As a part of the general reorganization of Government agencies providing for the concentration of authority over food in the Department, the nutrition functions of the Office of Defense Health and Welfare Services were ordered transferred, insofar as practicable, to the Department of Agriculture by Executive Order 9310 on March 6, 1943. In the Department they were assigned to a newly created Nutrition and Food Conservation Branch of the Food Distribution Administration.⁵⁴ The Bureau of Home Economics was renamed the "Bureau of Human Nutrition and Home Economics," and enlarged by the transfer of the Division of Protein and Nutrition Research from the Bureau of Agricultural Chemistry and Engineering.⁵⁵ These administrative moves helped to establish the preeminence of the Department of Agriculture as the seat of nutrition research and programs among Government agencies.

Various wartime research and program activities of the Department helped to set the stage for the first international conference on food and agriculture, held at Hot Springs, Va., in May and June of 1943. Concern over nutrition by the Department of Agriculture and the National Research Council in the United States was paralleled by more agitated concern by the British Food Ministry over the national diet in the United Kingdom where food stocks were low and more drastic changes in the national diet were required. The wartime cooperation between the Department of Agriculture and the British Food Mission on the Combined Food Board resulted in the exchange of information on nutrition and pointed up the desirability of holding such an international conference.

On the recommendation of the Hot Springs conference, the United Nations Interim Commission on Food and Agriculture was set up to work out plans for a permanent organization. A constitution for the Food and Agriculture Organization of the United Nations was completed and approved by more than the required minimum number of 20 governments by July 1945. The first conference of FAO was held at Quebec, Canada, in October 1945. Gove Hambidge, who had edited the Department of Agriculture *Yearbook* from 1936 to 1942 and coordinated research publications of the Agricultural Research Administration from 1942 to 1945, resigned from the Department on June 28, 1945, to become Executive Secretary of the Interim Commission on Food and Agriculture. Soon thereafter he became the first Director of Information of the Food and Agriculture Organization.

It was expected that the task of collecting and interpreting basic data on food and agriculture in the United States would devolve on the United States Department of Agriculture. Data submitted by other member nations, it was expected, would become available to United States research scientists. A vast improvement in world statistics on agriculture and nutrition and in the understanding of problems in international trade of agricultural commodities was expected to result from this interchange. It was felt that American agriculture should not return to the prewar policy of self-containment, but that the real answer to tremendous production was to raise nutritional standards and thus increase consumption on a worldwide basis (304, 1945, p. 13).

While negotiations were underway for the establishment of an international organization to work on long-term cooperation in food and agriculture, the immediate problem of postwar relief was being discussed by the Allied Governments and plans were being made for an international relief organization. In Great Britain, on December 3, 1940, a committee under the chairmanship of Sir Frederick Leith-Ross was established to prepare for the relief of the "plundered countries" under Nazi occupation. On September 24, 1941, a meeting of representatives of the Allies fighting in Europe was held in St. James's Palace, London, to consider means of dealing with postwar relief in Europe. Concepts regarding the nature of an international relief organization developed steadily and active United States participation in the discussions began soon after United States entry into the war.

Postwar relief needs were an important consideration in the objectives of the International Wheat Council, established in April 1942, by agreement among four wheat exporting nations, Argentina, Australia, Canada, and the United States, and one importing nation, the United Kingdom. In July 1942 the British Government formed the Middle East Relief and Refugee Administration. On November 21, 1942, President Roosevelt appointed Herbert H. Lehman of New York as Director of the newly created Office of Foreign Relief and Rehabilitation Operations in the Department of State.

By the fall of 1943 various proposals and counterproposals had been considered, and an acceptable draft of an agreement to establish the United Nations Relief and Rehabilitation Administration had been developed. On November 9, 1943, the representatives of 44 nations met in the White House to sign the agreement. The first meeting of the council was held immediately in Atlantic City, N.J. Herbert Lehman was named Director General. By January 1945 he had created an organization which was prepared to take over the relief job from the military forces in occupied territories. Two key men from the Department of Agriculture assumed leading roles in this organization. Roy F. Hendrickson, Director of the Office of Distribution in the War Food Administration, became Deputy Director General in charge of the Bureau of Supply, and Morse Salisbury, Director of the Office of Information of the Department and the War Food Administration, became Director of Public Information (233, *vol. 1*, pp. 7-43).

Soon after the war in Europe ended, War Food Administrator Marvin Jones asked to be relieved of his responsibilities so that he could return to his position as judge on the United States Court of Claims. President Truman persuaded him to stay on for a short time, but on May 22, 1945, Jones again asked to be relieved, this time setting June 30, 1945, as a suggested date of termination. His letter read in part:

While the war was being fought on both fronts there was considerable logic in having an independent War Food Administration. It has worked well. In each of the war years there has been an outstanding record of production. There has been complete cooperation between the Secretary of Agriculture and myself.

Now, however, that victory in Europe has been achieved, I feel that the work of the Department and War Food could well be carried on by the Secretary of Agriculture, probably with somewhat less expenditure of funds (271, *May 26, 1945*).

President Truman accepted Jones' resignation and concurred in his recommendation. The War Food Administration was ended on June 30, 1945, and its personnel and functions returned to the Department of Agriculture. Secretary Wickard resigned and took over new responsibilities as Rural Electrification Administrator. Though the war in Europe had been over for 2 months and the end of the war in the Pacific was only 2 months away, the lessening of world needs for United States food was not yet in sight.

¹ 7 F.R. 10179.

² Baker, Gladys L., Factors Relevant to Reorganizations for War, Type-written manuscript, Mar. 1948, History Branch Files, USDA, p. 228.

³ Baker, G. L., Factors Relevant to Reorganizations, p. 217; Letter, Franklin D. Roosevelt to James F. Byrnes, Dec. 7, 1942, History Branch Files, USDA.

⁴ 8 F.R. 7207.

⁵ Baker, G. L., Factors Relevant to Reorganizations, p. 217.

⁶ Baker, G. L., Factors Relevant to Reorganizations, p. 221.

⁷ Memorandum, H. W. Parisius to the Secretary, Jan. 15, 1943; Baker, G. L., Factors Relevant to Reorganizations, History Branch Files, USDA, pp. 246-7.

⁸ Food Production Administration, Food Production Memorandum no. 2, Jan. 22, 1943, History Branch Files, USDA.

⁹ Food Distribution Administration, Director's Memorandum no. 2, Jan. 13, 1943, History Branch Files, USDA.

¹⁰ 58 Stat. 918.

¹¹ U.S. War Food Administration, Administrator's Memorandum no. 33, Nov. 25, 1943, History Branch Files, USDA.

¹² 58 Stat. 284.

¹³ 58 Stat. 734.

¹⁴ 8 F.R. 3807.

¹⁵ Letter, Franklin D. Roosevelt to Marvin Jones, June 30, 1943, History Branch Files, USDA.

¹⁶ U.S. War Food Administration, Administrator's Memorandum no. 11, Rev. Supp. 1, Aug. 25, 1943, History Branch Files, USDA.

¹⁷ U.S. War Food Administration, Administrator's Memorandum no. 30, Oct. 28, 1943, History Branch Files, USDA.

¹⁸ U.S. War Food Administration, Administrator's Memorandum no. 27, Supp. 4, Amendment 2, Mar. 18, 1944, History Branch Files, USDA.

¹⁹ U.S. War Food Administration, Administrator's Memorandum no. 27, Rev. 1, Dec. 13, 1944, History Branch Files, USDA.

²⁰ 8 F.R. 13783.

²¹ Memorandum of Understanding Between the War Food Administration and the Foreign Economic Administration Concerning the Conduct of the Foreign Food Program of the United States, July 19, 1944, History Branch Files, USDA.

²² 8 F.R. 6807.

²³ 8 F.R. 8044, 8 F.R. 12922, 8 F.R. 12859, 8 F.R. 13789, 8 F.R. 17333, 9 F.R. 8283.

²⁴ 8 F.R. 9439, 10 F.R. 2679.

²⁵ 57 Stat. 52.

²⁶ 8 F.R. 5825, 8 F.R. 10705, 9 F.R. 4379, 9 F.R. 12115.

²⁷ 7 F.R. 7326, 7 F.R. 7301, 7 F.R. 8723.

²⁸ 7 F.R. 8460.

²⁹ 9 F.R. 13911.

³⁰ 8 F.R. 947.

³¹ 56 Stat. 1018.

³² 7 F.R. 4749, 7 F.R. 4750.

³³ 7 F.R. 9218.

³⁴ 7 F.R. 10024.

³⁵ 8 F.R. 1426.

³⁶ U.S. War Food Administration, Administrator's Memorandum no. 2, Rev., June 21, 1943.

³⁷ Memorandum of Understanding Relative to Employment in the United States of America of Agricultural Workers from Barbados, May 24, 1944, History Branch Files, USDA.

³⁸ 56 Stat. 1759.

³⁹ U.S. War Food Administration, Administrator's Memorandum no. 2, Rev., June 21, 1943, History Branch Files, USDA.

⁴⁰ 8 F.R. 4818.

⁴¹ 8 F.R. 4681.

⁴² 6 F.R. 6409.

⁴³ 6 F.R. 6797.

⁴⁴ 7 F.R. 6518.

⁴⁵ 8 F.R. 10705.

⁴⁶ 7 F.R. 10179.

⁴⁷ 8 F.R. 827.

⁴⁸ 8 F.R. 3471.

⁴⁹ 8 F.R. 10703.

⁵⁰ 5 F.R. 2420.

⁵¹ Memorandum, Raymond C. Smith, Chairman, Committee on Post War Plans, to Regional Chairmen, Sept. 5, 1942; General Guide and Assumptions for Preparation of Agriculture Post War Plans, July 22, 1943, History Branch Files, USDA.

⁵² USDA Interbureau Committee on Post-War Programs, Assumptions for Post-War Plans, Mimeographed, 7 pp., Jan. 1944, History Branch Files, USDA.

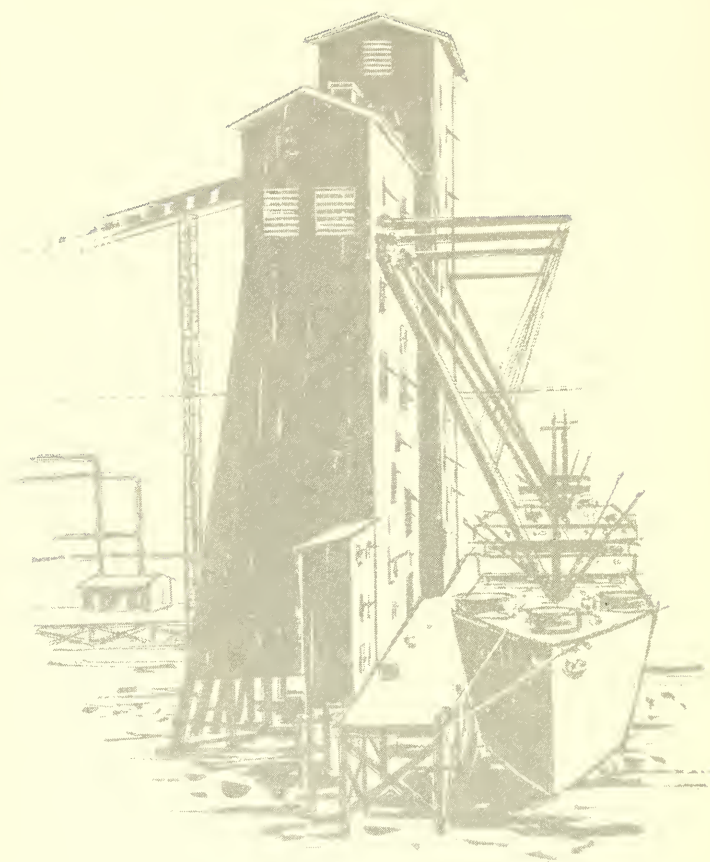
⁵³ Letter, Claude R. Wickard to Bernard M. Baruch, Nov. 25, 1943, History Branch Files, USDA.

⁵⁴ Food Distribution Administration Director's Memorandum no. 2, Supp. 8, Mar. 22, 1943, History Branch Files, USDA.

⁵⁵ Agricultural Research Administrator's Memorandum no. 5, Feb. 13, 1943, History Branch Files, USDA.



*“Food will win the war
and write the peace.”*



The United States supplied more food to the hungry abroad than any other nation had ever supplied before.

The Postwar Period, 1945-1948

Famine was the heritage of war in many parts of the world in 1945. Most of the best productive agricultural areas in Europe had been devastated and the means of production destroyed. Population shifts had disrupted entire regions. Lack of shipping cut off many areas from traditional sources of supply.

Prospective world famine was the most acute problem facing Clinton P. Anderson when he took the oath of office as Secretary on June 30, 1945. The Department's task was to help American farmers meet this challenge and, at the same time, to assist them to convert to a peacetime economy. Agriculture shared the hopes of the rest of the Nation for a better world, not simply a return to prewar conditions. Yet many people feared that an agricultural depression would follow the end of the war just as it did in 1920-21. Thus, policy was aimed to avert famine and avert depression at the same time.

The new Secretary brought a considerable knowledge of farm problems to his post. When appointed, he was serving as Representative from New Mexico and was chairman of the House Committee To Investigate Food Shortage. His work with this committee had convinced Clinton P. Anderson that the farmer should be encouraged to produce at his fullest capacity to meet both domestic and foreign needs. An active businessman, Secretary Anderson also owned and operated a farm in New Mexico.

Organization

A career administrator, John B. Hutson, became Under Secretary on June 30, 1945. Hutson had occupied a number of important posts in the Department. On December 31, 1944, he had

transferred from the Department to the Office of War Mobilization and Reconversion, and had returned from that agency to become Under Secretary. After Hutson resigned effective March 22, 1946, he was succeeded by another man with a notable record in the Department, Norris E. Dodd.

Dodd became Under Secretary effective April 8, 1946. He had had a long career in the Agricultural Adjustment Administration, and was himself a farmer; he operated a farm near Haines, Oreg. Dodd served as Under Secretary until June 7, 1948.

Charles F. Brannan, who had been appointed Assistant Secretary effective June 21, 1944, served in that position throughout Anderson's administration. He had been a career employee of the Department in both Washington and field offices and in both legal and administrative positions.

Upon taking his oath of office as Secretary, Clinton P. Anderson stated that his immediate concern would be with four chief problems fundamental to a sound food program. These were: (1) Abundant production to meet wartime requirements; (2) the guarantees farmers needed from Government to get greater production; (3) the necessary action to make good on the promises of Government to farmers; and (4) improvements in distribution so that supplies might be shared more fairly by everyone (*312, no. 1212-45*).

In order to attack these and other problems, Secretary Anderson planned a major reorganization of the Department. The War Food Administration had been abolished effective the day Anderson took office, its functions transferred to the Secretary of Agriculture.¹ Secretary Anderson appointed a special Committee on Organization to recommend a reorganization. Headed by Milton Eisenhower, the committee included in its membership J. W. Tapp, G. B. Thorne, E. W. Gaumnitz, Arthur Moore, Alexander Nunn, W. R. Ronald, and members of the Department's staff.

Secretary Anderson announced the establishment of the Production and Marketing Administration to become effective August 20, 1945. The new agency was headed by Under Secretary John B. Hutson. The Secretary stated in a memorandum to departmental employees that the Administration was organized primarily along commodity lines. Responsibility for all action programs for a particular commodity, whether production or marketing, was vested in one of the 10 commodity branches—Cotton, Livestock, Dairy, Poultry, Fats and Oils, Fruit and Vegetable, Sugar, Grain, Tobacco, and Special Commodities.

Agricultural conservation and crop insurance programs and work with farmers through the State and county agricultural committees became the responsibility of the Field Service Branch. School lunch, direct distribution, and other food use and preservation programs were placed in the Food Distribution Programs Branch.

Additional branches were Materials and Equipment, Shipping and Storage, Marketing Facilities, Labor, Fiscal, Budget and

Management, and Compliance and Investigation. Three offices—Requirements and Allocations, Price, and Information—were set up (306, no. 1118).

Within a short time, the Federal Crop Insurance Corporation became a bureau within the Production and Marketing Administration, but with full responsibility for its own programs (306, no. 1118, *supp. 1*). Other changes were made in the organization from time to time to meet changing conditions. Perhaps the most important under Secretary Anderson came on March 14, 1947, with the end of most war-related activities. The Special Commodities Branch, Materials and Equipment Branch, Office of Requirements and Allocations, Office of Foreign Programs Coordination, and Office of Price were abolished (306, no. 1118, *supp. 10*).

Other departmental agencies also were reorganized to meet changing conditions during Secretary Anderson's administration. These reorganizations are discussed elsewhere in this chapter in relation to programs. However, one series of changes was of importance to all agencies of the Department in that it involved program planning for the Department.

Effective December 31, 1945, the Secretary transferred the responsibility for general agricultural program planning from the Bureau of Agricultural Economics to the Office of the Secretary. The Bureau remained responsible for the statistical and economic research work of the Department. The Secretary also established a Situation and Outlook Board. The Board was to be responsible for the technical review and approval of all economic situation and outlook reports prepared in the Department (306, no. 1139).

The program planning work transferred from the Bureau of Agricultural Economics to the Office of the Secretary was assigned to the Policy and Program Committee. The Secretary served as Chairman of the new Committee, which was made up of the heads of the major departmental agencies. The Committee was "to develop policies to serve as guides in meeting the difficult problems with which we shall be faced" (306, no. 1140).

Early in 1947, the Secretary appointed a subcommittee of the Policy and Program Committee to carry out long-range planning on agricultural policy. Its conclusions were presented to the Senate and House agricultural committees.

On June 13, 1947, a Production Goals Coordinating Committee was appointed to study production goals and to make recommendations regarding them to the Secretary. This Committee was a subcommittee of the Policy and Program Committee. Other subcommittees were also active.

Many of the problems faced by the Secretary upon his inauguration demanded immediate attention. Two of these were the removal of wartime restrictions on the distribution of food within the United States and the division of available supplies between the United States and our Allies.

Rationing and Price Controls

Germany had surrendered before Anderson became Secretary, and Japan was to follow within a few weeks. Most Americans felt that they had patriotically sacrificed during the long war; many now felt that they were entitled to relax and enjoy the fruits of their labor.

The first step to make more meat available to American consumers came on September 8, 1945, when the Price Administrator, upon recommendation of the Secretary of Agriculture, removed controls of the Office of Price Administration over the amount of livestock slaughtered and the shipment of meat.² A few weeks later, on November 23, 1945, the Secretary of Agriculture announced the termination of rationing of meats, canned fish, and fats and oils, effective November 24, 1945 (312, no. 2161-45). Price controls on most food products lapsed on July 1, 1946. Price controls on livestock and meat were reimposed from September 1, 1946, to October 15, 1946. Controls on all food products except sugar, sirups, and rice were removed October 24, 1946.³ Price controls on rice expired June 30, 1947, and were removed from edible molasses and sirups August 9, 1947.⁴

The control of sugar was assigned to the Department of Agriculture with the passage of the Sugar Control Extension Act on March 31, 1947.⁵ The Secretary of Agriculture established the Sugar Rationing Administration on the same date for the purpose of regulating the distribution and price of sugar and sugar products (306, no. 1190). The Administration ceased to function on March 31, 1948, when authority for sugar controls expired.

Food for Relief Abroad

The problems of removing price and rationing controls for the benefit of American consumers and producers were closely tied to a more acute problem, that of providing food for starving millions abroad. Food production declined during 1945-46 in Europe and North Africa because of drought and difficulties resulting from the war. A food crisis in the Orient resulted from a shortage of fertilizers, draft power, and manpower, and from a breakdown of normal trade. Distribution problems aggravated the situation in many areas.

The Department took a number of steps to increase shipments of food, but the situation worsened during the last half of 1945. It became obvious that grain was the best immediate answer to needs abroad. On February 6, 1946, the President announced the

following nine emergency measures to meet the needs: A vigorous campaign to secure the cooperation of consumers, bakers, and retailers in conservation of food, with particular emphasis on bread; discontinuance of the use of wheat in the direct production of alcohol and beer and limitation of the use of other grains for production of beverage alcohol and beer; an increase in the wheat flour extraction rate to 80 percent; control of wheat and flour inventories; giving the shipment of essential foods preference in rail use; direct Government control over exports of wheat and flour; the export during the calendar year of 375,000 tons of fats and oils, 1.6 billion pounds of meat, and increased quantities of dairy products; release of ships for the movement of food to Europe; and the development of ways of conserving grain being fed to livestock and poultry for use as human food.⁶

Public support was necessary if the program was to succeed. Many able private citizens could contribute ideas and recommendations for meeting the needs of the starving. The President appointed a Famine Emergency Committee, with former President Herbert Hoover as Honorary Chairman and Chester C. Davis as Chairman, to aid in formulating a program for voluntary cooperation in meeting the food crisis.

The Famine Emergency Committee recommended the appointment of a National Famine Emergency Council of about 125 members. The Committee also made recommendations for procuring more available supplies for shipment abroad. A special mission to study and report on the situation abroad was established under the leadership of Herbert Hoover.

The State directors of the Production and Marketing Administration and the chairmen of the county agricultural conservation committees were designated emergency food program managers on March 8, 1946 (*312, no. 511-46*). An Office of Emergency Food Program was established in the Office of the Secretary on March 19, 1946, to coordinate the program for providing food for relief shipments (*306, no. 1156*).

The programs developed by the Committee and the Department of Agriculture were basically voluntary so far as the American people were concerned, with some controls over grain. Some criticism of the program was expressed, with demands for consumer rationing in the United States and the requisition of food supplies for shipment abroad. One critic, Theodore W. Schultz of the University of Chicago, said:

The United States has on several major counts—seriously, in my judgment—mismanaged its food supplies. . . . in the United States the average person's consumption has jumped to the unprecedentedly high level of thirty-three hundred calories per day. . . . we should return to our wartime levels of food consumption, in order to stand by the European and Oriental peoples during this world-wide food crisis (*156, pp. 22-23*).

Whether or not more might have been done, it is certain that the United States supplied more food to the hungry abroad than

any other nation has ever done before or since. The Department of Agriculture took a leading part in the program. The Department issued several food orders, the most important of which was War Food Order 141, restricting the distribution and use of grain. Beginning March 1, 1946, millers were required to produce only flour of an 80-percent extraction. The use of wheat by feed manufacturers was restricted and its use in making alcohol and beverages was prohibited. Effective April 22, 1946, flour millers and food manufacturers were restricted to the use of 75 percent of the quantity of wheat used in corresponding months a year earlier. On May 1, 1946, millers and food manufacturers were limited to a 21-day inventory of wheat.⁷

In an endeavor to increase the flow of wheat to market, the Commodity Credit Corporation on April 3, 1946, offered to buy wheat for immediate delivery at the market price on any later date the seller might elect on or before March 31, 1947 (347). This certificate plan was supplemented on April 19, 1946, when the Department offered a bonus of 30 cents a bushel on wheat delivered by May 25. About 85 million bushels of wheat were acquired for export under this plan. The Department also offered a bonus of 30 cents a bushel above the market price to producers for corn sold to the Commodity Credit Corporation, and offered to buy an unlimited quantity of oatmeal from American millers (312, no. 849-46).

The Office of Price Administration worked with the Department of Agriculture to increase the ceiling prices for grain. The purpose was to induce farmers to sell their grain for shipment overseas and for human consumption rather than to feed it to livestock.

The Department worked closely with the United Nations Relief and Rehabilitation Administration (UNRRA), which distributed much of the relief food. UNRRA operations were discontinued on May 31, 1947. The Department also cooperated with the International Emergency Food Council, established June 20, 1946, as a successor to the Combined Food Board.

The United States shipped 400 million bushels of wheat and 168 million bushels of other grains used for food overseas between July 1, 1946, and June 30, 1947. During the previous year, the United States exported 387 million bushels of wheat.

As the threat of famine continued into the summer of 1947, food conservation measures were kept in force, and on September 25, 1947, a Citizens Food Committee was appointed by President Truman to advise on food conservation. Earlier, a committee headed by Secretary of the Interior Krug had been asked to report on the effect foreign aid would have on our natural resources. Another committee, headed by Secretary of Commerce Harriman, had been asked to determine the limits within which the United States could offer economic assistance to foreign countries.

The Citizens Food Committee set as its objective the adoption of conservation measures to make immediately available 100 million

extra bushels of grain to feed the hungry people of Europe. In this effort, the committee asked the cooperation of the grain consuming industries, farmers who fed grain to livestock and poultry, and the American people.

Voluntary denial by the people was requested when, on October 5, 1947, Charles Luckman, Chairman of the Citizens Food Committee, appealed to every citizen to forego meat on Tuesdays and poultry and eggs on Thursdays. He asked all to eat less bread, at least a slice less a day. A few days later, President Truman endorsed the program as a means of saving grain. According to several newspaper reports, the public as a whole was apathetic to this program. The poultry industry took a strong stand against "poultryless Thursdays," pointing out that poultry not shipped to market continued to eat grain. Within a month, poultry raisers were shipping crates of chickens to Luckman as a protest measure. Poultryless Thursday was dropped on November 7, 1947, and eggless Thursday early in 1948. Meatless Tuesday was not dropped, at least officially, until April 21, 1948.

In the fall of 1947, the distillers of industrial alcohol shut down their plants for a 60-day period, and the brewing industry entered into a voluntary agreement to conserve grain. A law permitting industries to enter into voluntary agreements to allocate scarce commodities was approved December 30, 1947. The Department of Agriculture attempted to persuade several industries to make such agreements in order to conserve grain, but none was made. The brewing industry, however, continued its earlier agreement until the late spring of 1948.

The baking industry adopted a program which included giving up the consignment selling of bread; that is, the delivery of bread to retailers with the retailers obligated to pay only for bread sold. The restaurant and related industries adopted a program aimed at a reduction in wheat consumption.

The Citizens Food Committee worked with the land-grant colleges and the Department of Agriculture in developing programs to save farm grain. Widespread appeals to the general public urged individuals to save food (266).

The Committee was terminated on November 20, 1947. Committee members were appointed to a new Citizens Food Advisory Committee, and the food conservation program was turned over to a Cabinet Food Committee (162, Nov. 21, 1947).

The Department of Agriculture continued doing much of the staffwork for the committees and added new programs to conserve food. On January 27, 1948, the Secretary established an Office for Food and Feed Conservation. The new Office was to disseminate information as to ways and means that consumers, farmers, industrial users, and other handlers of food and feed might help in alleviating shortages and stabilizing prices (306, no. 1204). The Office performed this function until June 30, 1948, when, with the expiration of its appropriation, it was terminated.

The United States exported more than 19 million tons of food in 1947-48, the total slightly greater than for the previous year. Our exports of wheat and wheat products totaled 468 million bushels, the largest on record up to that time. Thus, the efforts to ship grain overseas brought results.

Providing food was a necessary emergency measure for 3 years after the end of World War II. It continued to some extent for several years more. It was also necessary to aid the European nations to restore their productivity, at least to prewar levels. The United Nations Relief and Rehabilitation Administration (UNRRA) worked toward this end until it was abolished. The function was then carried on by the Food and Agriculture Organization of the United Nations (FAO). The European recovery program, better known as the Marshall plan, also assisted greatly in a number of countries, beginning in 1948. The United States sent livestock, seed, fertilizer, and farm machinery to the nations devastated by war.

Most of the staffwork with the European recovery program, as with other foreign programs, was carried out by the Office of Foreign Agricultural Relations. This Office also represented American farm interests in negotiations prior to the signing of the General Agreement on Tariffs and Trade (GATT), signed at Geneva on October 30, 1947, and in negotiations leading to a charter for an International Trade Organization (ITO), which was signed at Havana on March 24, 1948. These agreements pointed toward increased international trade and, in general, sought to obviate trade restrictions of the sort that strangled world trade between the wars. The ITO was subsequently abandoned when it became clear that the United States would not ratify the agreement.

The Office of Foreign Agricultural Relations was called upon to assist in a greatly expanded postwar program of international collaboration in agricultural techniques. Work at intergovernmental agricultural stations in Ecuador, El Salvador, Guatemala, Nicaragua, and Peru continued, while agricultural missions visited countries of the Western Hemisphere, the Middle East, and the Far East. With the end of the war, the Office arranged training programs for many foreign students of agriculture in collaboration with other State and Federal governmental agencies and with foundations and private institutions.

Production Adjustments

Throughout the period from 1946 through 1948, the Department used its production adjustment programs to obtain larger quantities of products needed for domestic consumption and overseas relief. Production goals for 1946, which had been announced

on November 30, 1945, were revised on February 21, 1946, in the light of the world food crisis. Generally, the new goals called for an increase in grain, pea, and soybean production (312, no. 397-46).

Production goals were continued at higher than prewar levels during 1947 and 1948, but were reduced for some crops, partly to encourage shifts to the most needed crops. The 1947 goals called for decreases in grain acreages in order to encourage an expansion in flaxseed. The law required that high levels of price support be maintained through December 31, 1948, in order to give farmers an opportunity, like industry, to convert from war to peacetime production. Levels of market prices, however, remained high enough to avoid much use of the price-support program for major commodities. The price-support program for potatoes in both 1947 and 1948 was limited to growers who complied with reduced acreage goals.⁸ On the other hand, flaxseed was supported at a relatively high level in 1948 (312, nos. 542-47, 2380-47).

For most basic crops during 1946, 1947, and 1948, marketing quotas and acreage allotments were not in effect. Tobacco, an exception, had both allotments and quotas. The Secretary of Agriculture proclaimed a marketing quota for the 1948 crop of peanuts.⁹ Growers voted in favor of quotas for the 1948, 1949, and 1950 crops, but the Secretary of Agriculture terminated quotas on the 1948 crop on January 2, 1948, because of the critical world shortage of fats and oils.¹⁰

Legislation

The President proclaimed the cessation of hostilities effective December 31, 1946.¹¹ This meant that the Department's obligation to support many commodities at not less than 90 percent of parity would terminate on December 31, 1948. On August 5, 1947, Congress directed the Commodity Credit Corporation to support wool prices at the 1946 level until December 31, 1948.¹² If all major price supports were not to revert sharply to prewar levels, new legislation was imperative.

During 1947, the Committee on Agriculture of the House of Representatives and the Committee on Agriculture and Forestry of the Senate held extended hearings in several parts of the United States on long-range agricultural policy. Two opposing viewpoints developed. One was to extend the wartime system of high-level, fixed price support; the other was to return to the prewar system of fixing support levels in accordance with existing supplies. The Agricultural Act of 1948, as finally passed, was a compromise between the viewpoints expressed by leaders of the two groups, Representative Clifford R. Hope of Kansas and Senator George D. Aiken of Vermont (48).

The act was in two titles. Title I continued mandatory price support at 90 percent of parity for 1949 crops of wheat, corn, rice, peanuts used as nuts, cotton, and tobacco marketed before June 30, 1950, if producers had not disapproved marketing quotas. Similar support was also provided for hogs, chickens, eggs, and milk through December 31, 1949. Potatoes harvested before January 1, 1949, were to be supported at 90 percent of parity, while the following year the rate was to be not less than 60 percent of the parity price nor more than the 1948 level. A number of "Steagall" commodities, that is, commodities which had been guaranteed support at 90 percent of parity for 2 years after the war by the Steagall amendment of October 2, 1942, including beans, dry peas, turkeys, soybeans for oil, flaxseed for oil, peanuts for oil, American-Egyptian cotton, and sweetpotatoes, were to be supported at not less than 60 percent of parity. Wool marketed before June 30, 1950, was to be supported at the 1946 level.¹³ In other words, the laws already in effect were extended for another year. This title of the law became effective.

Title II of the new law provided for a flexible price-support system; the level would vary from 60 to 90 percent for basic crops in accordance with the supply outlook. The idea was to provide a price floor. A new method of computing parity prices was part of the title; however, the title never became effective. It was superseded by the Agricultural Act of 1949 on October 31, 1949.

Changes in Crop Insurance

The Federal Crop Insurance Corporation was transferred out of the Production and Marketing Administration and was reestablished as a separate organization in the Department effective July 1, 1947 (*306, no. 1196*). Congress, partly because of heavy losses on cotton in 1946, limited the crop insurance program, beginning in 1948, to experimental operations. Insurance was authorized in only a limited number of counties, including 200 wheat counties and 56 cotton counties. In 1948, 375 county programs were in effect, compared with 2,400 in 1947. A comprehensive type of contract covering a number of crops was inaugurated in two counties in 1948 (*193*).

Marketing and Distribution Programs

Because of world need for food and fiber during most of this period, there was little emphasis upon disposal programs. The

National School Lunch Act, approved June 4, 1946, established the school lunch program on a continuing basis. The act provided for an annual appropriation, which was to be used for making cash grants to State agencies administering the program and for bulk food purchases by the Department for distribution to participating schools.¹⁴ The abundant foods program, an informational service on food supplies, was begun in 1945, in anticipation of spot surpluses of various foods. It was known later as the plentiful foods program.

While there was no immediate pressure of agricultural surpluses in 1946, Representative Clifford R. Hope and other leaders, looking ahead to problems which might develop later, concluded that the Nation would benefit if it gave the same attention to the problems of agricultural marketing and distribution that it had given to agricultural production. Many Congressmen and farm leaders also had concluded that the only permanent and satisfactory solution of the problem of surpluses, particularly for perishable commodities, lay in a better system of marketing and distribution. After a number of studies of the problem had been made and hearings had been held on several bills, the Research and Marketing Act of 1946 was passed, and it was approved by the President on August 14, 1946.¹⁵

The act authorized an extension of existing research and provided for large-scale marketing research, including contract research, and established a system of committees to advise on the research. The title of the act providing for large-scale marketing research also authorized the Secretary of Agriculture to establish a new marketing agency.

On December 27, 1946, the Secretary of Agriculture designated E. A. Meyer as Administrator of the act. He also served as an Assistant Administrator of the Production and Marketing Administration. The relationship with the Production and Marketing Administration was ended on July 18, 1947. The Administrator of the act was to be responsible for coordinating and integrating the marketing programs and policies of the Department. On July 29, 1949, responsibility for the administration of the act was assigned to the Agricultural Research Administrator (*306, nos. 1182, 1199, 1237*).

Research under the act did not quickly achieve all that its sponsors had believed possible. Five years after the act had been passed, Congressman Hope said: "It is not necessary for me to say that the results under the Research and Marketing Act have been disappointing." In his view, more might have been achieved if the Secretary of Agriculture had placed all marketing work, particularly research, in a new agency (*110*).

Nevertheless, a number of creditable advances were made in many aspects of marketing. These ranged from developing better methods of shipping fruit and vegetables to assisting in the planning of large market centers.

Two years before he was given authority to administer the Research and Marketing Act, the Administrator of the Agricultural Research Administration, then W. V. Lambert, had been made responsible for coordinating all research activities, other than economic research. The Administrator, according to Secretary's Memorandum 1187 of March 19, 1947, was to examine all research activities, review proposals for new research, consult with agency heads on research needs, and make recommendations to the Secretary regarding the research activities of the Department.

Postwar Research

Research activities in the Department during this period touched virtually every aspect of farm life, agricultural production, and marketing. The results of the work were carried to the farmers and others vitally concerned by the Office of Information, both directly and indirectly, by the Cooperative Extension Service, and by Department field employees. During this period, the Office of Information did its first work with television, a medium destined to carry research results directly into farm homes.

Department scientists, cooperating with the State experiment stations, worked to improve the yields of several crops through a combination of improved practices. Experiments on corn culture, started in 1944 in cooperation with the North Carolina State Experiment Station, indicated that such practices could increase production several times. The plant breeders' knowledge of corn hybrids; the soil scientists' knowledge of soil types, fertilization, and plant spacing; the entomologists' knowledge of insect control; and the agricultural engineers' knowledge of weed control and fertilizer application methods were integrated into one experiment. Using this knowledge, corn yields in North Carolina were consistently increased in experiments from 20 to over 70 bushels per acre. Such results from the integration of related phases of crop production research offered possibilities for further spectacular gains in crop production.

The Department's long history of noteworthy contributions to medical science continued during this period. The important physiological effect of rutin on capillary blood vessels was first postulated by James F. Couch and others working with him at the Eastern Regional Laboratory. The University of Pennsylvania Medical School, working in collaboration with the laboratory, demonstrated that rutin was effective in the treatment of capillary fragility. Rutin was first prepared in the laboratory from high quality flue-cured tobacco. The researchers then found that the

buckwheat plant was an economical source of rutin and developed practical procedures for its manufacture (58).

Economic research and service continued to supply data needed to make policy decisions. Primary statistical data were gathered, summarized, and published with great rapidity. These data were of great importance in planning oversea relief allocations. The outlook conferences, conducted by the Bureau of Agricultural Economics and the Cooperative Extension Service, with cooperation from other agencies, set up guides for meeting the exceptional demand for food in connection with European recovery and foreign relief.

A research study on the long-range prospects for American agriculture was prepared by the Bureau of Agricultural Economics for the House Committee on Agriculture. A study of farm mechanization indicated that in 1945 each farmworker produced enough to support himself and 13 other persons, while in 1920 he produced enough to support himself and 9 other persons. The annual Balance Sheet of Agriculture, inaugurated during this period, gave an overall view of the position of American agriculture in the economy.

Regulatory Activities

Many regulatory activities, such as meat inspection, continued to serve the entire population. The Secretary transferred the enforcement of the Meat Inspection Act and the 28-Hour Law from the Production and Marketing Administration to the Bureau of Animal Industry on August 21, 1946. The responsibility for inspecting and certifying canned wet animal food was also transferred to the Bureau on October 24, 1946 (306, nos. 1172, 1177).

A cooperative project with Mexico to eradicate foot-and-mouth disease in that country attracted much attention. Congress authorized the project on February 28, 1947, in accordance with a treaty of 1930.¹⁶ The program was on a cooperative basis, with a director, Oscar Flores, appointed by Mexico and a codirector, Maurice S. Shahan, by the Secretary of Agriculture of the United States. Both nations furnished personnel and funds for the program. United States personnel were assigned by the Department of Agriculture. A combination of slaughter and vaccination was adopted as an eradication measure. The program demanded heroism on the part of the veterinarians and inspectors carrying it out; several workers from Mexico and the United States were killed by mobs. Nevertheless, by the spring of 1951, foot-and-mouth disease in Mexico had been wiped out, and, on September 1, 1952, the Secretary of Agriculture lifted the embargo on imports of fresh meat and livestock coming from Mexico into the United States (63). The close relationship between research and action was

illustrated by the action of Congress, which on April 24, 1948, had authorized research on foot-and-mouth disease.

The Insecticide Act of 1910 was replaced in 1947 by the Federal Insecticide, Fungicide, and Rodenticide Act.¹⁷ The Department was now required to regulate the marketing of weedkillers and rodenticides, as well as insecticides and fungicides. The enforcement of the new act was assigned to the Livestock Branch of the Production and Marketing Administration.

On August 1, 1947, Congress authorized the establishment and maintenance of minimum standards of quality, maturity, grading, and inspection requirements for fruits and vegetables and authorized the requirement of compulsory inspection under a marketing agreement or order.

Regulatory work required careful consideration of many factors. Thus, on December 9, 1946, in accordance with the Administrative Procedure Act, the Secretary established an Office of Hearing Examiners. Among the duties of the new Office were the holding of hearings relating to proceedings arising under the Agricultural Marketing Agreement Act of 1937; ratemaking and disciplinary proceedings under the Packers and Stockyards Act; and disciplinary proceedings under the Commodity Exchange Act, the Perishable Agricultural Commodities Act, the Federal Seed Act, and the Grain Standards Act (306, no. 1180).

The Commodity Exchange Act regulated trading in major agricultural commodities on the Nation's exchanges. The administration of the act was transferred from the Production and Marketing Administration to a newly established Commodity Exchange Authority, effective February 1, 1947 (306, no. 1185). The removal of price controls after World War II had been marked by increased activity in the futures markets and thus an increase in activity under the Commodity Exchange Act.

Conserving the Soil

Food demands in the war years obliged farmers to draw on soil resources; meantime, pressure of farmwork, shortage of labor, and other handicaps interfered with conservation work. After the war, the Nation was called upon to look to its longtime duty to protect the soil, while, at the same time, doing its best to relieve famine abroad.

The Soil Conservation Service was responsible for technical assistance to land users, working primarily through soil conservation districts. By 1947, there were 1,865 soil conservation districts and 24 other conservation districts of varying types, which included more than three-fourths of the farms in the Nation.

Complete conservation plans had been developed for more than half a million of the Nation's farms. Nevertheless, the Soil Conservation Service pointed out that a greatly increased program was necessary if the damage to croplands resulting from World War II was to be repaired. In 1945, the Service resumed flood control and investigations. A territorial conservationist was appointed in Alaska in February 1948.

The agricultural conservation program administered by the Production and Marketing Administration offered farmers special incentives, either in cash payments or in materials or services, to cooperate in carrying out conservation practices. These practices were those approved by local and State committees from a national list of conservation practices.

Postwar Forest Problems

The supply of timber products was short throughout the war and for a year after it ended. Lumber and plywood shortages greatly retarded progress of the Government's postwar program to expedite housing construction. In analyzing the problem, the Forest Service undertook a reappraisal of the forest situation, which was completed in 1947.

The reappraisal showed that the volume of sawtimber in the country's forests had declined some 43 percent in 36 years, that sawtimber was being drained from the forests one and a half times as fast as it was being replaced by growth, and that there had been a marked deterioration in quality as well as quantity of timber. There was ample timberland in the United States, but cutting practices should be much improved and growing stock should be doubled.

Some things could be done on an immediate basis to improve the forests in existence. For example, a Forest Pest Control Act was passed and approved on June 25, 1947.¹⁸ Congress recognized the need for the control of forest insects and diseases on a nationwide basis, and on lands both publicly and privately owned. The act paved the way for the establishment of more adequate services and facilities for prompt detection and suppression, and authorized Federal cooperation with States and private owners to combat outbreaks of forest pests and parasites.

Forest lands are vital to watershed protection and the conservation of water resources. Some 80 million acres of forest and grazing land within the National Forests are suitable for grazing, and much of this land is important as a source of water for irrigation, power, and domestic supplies. The Forest Service faced a major problem after World War II in continuing to make as much of this land available for grazing as was consistent with the con-

servation of watersheds and the building up of ranges that had been damaged by overgrazing.

A subcommittee of the House Committee on Public Lands held hearings in 1947 in the Western States on grazing problems. As a result of these hearings, the committee made a series of recommendations to the Secretary of Agriculture, most of which were adopted. The Secretary, in response to one recommendation, appointed a National Forest Board of Review to advise in the solution of problems arising in connection with administering the National Forests (306, no. 1214). In addition the Forest Service utilized the services of about 800 local advisory boards.

The Secretary was unwilling to accept a proposal for a 3-year moratorium on livestock reductions on National Forest ranges. As he stated in his annual report for 1948:

It would have meant postponement of action badly needed to stop deterioration of watershed and range lands and start them on the road to recovery. The overgrazed conditions on many national forest ranges are too serious from the standpoint of both watersheds and forage to bear such a delay.

Some stockmen urged that National Forest lands "suitable for grazing" be turned over to the States or sold to individuals. However, the House committee, in its report on its hearings, said:

By reason of their tremendous importance to the Nation as a whole, our committee is of the unanimous opinion that our national forests should not be sold to private ownership or transferred to the States, but should remain in Federal ownership (287).

Expansion in Extension

The Bankhead-Flannagan Act, introduced by Senator John H. Bankhead of Alabama and Representative John William Flannagan, Jr., of Virginia, was approved June 6, 1945. It provided for an expansion of county extension work, and, particularly, for extension programs to reach a larger number of boys and girls and older youth.¹⁹ Thus, the Extension Service expanded its 4-H Club program substantially in the postwar period.

County agents were of major assistance in advising veterans as to opportunities in agriculture. The basic educational work of the Cooperative Extension Service continued both to aid farmers in adopting the new technological advances and to assist farmers and entire communities in dealing with problems of significance to the welfare of the community, State, and Nation.

As a result of a proposal made by Secretary Anderson, the Secretary of Agriculture and the president of the Association of Land-Grant Colleges and Universities jointly appointed a committee in October 1946 to study the Cooperative Extension Service.

The committee was headed first by Roy M. Green, president of Colorado Agricultural and Mechanical College, and later by John A. Hannah, president of Michigan State College. P. V. Kepner of the Department served as executive secretary of the committee. Its purposes were: (1) To make an appraisal of the past services and experiences in the cooperative system; (2) to study current basic problems in connection with cooperative extension work, with special attention to relationships between the Department and the colleges; and (3) to develop recommendations as to ways in which the Cooperative Extension Service could best meet the problems of the future. The committee submitted its report on June 21, 1948.

The report stressed the need for extension education among farm people by well-trained personnel who should be clearly recognized as staff members of the colleges. Extension's goal should be to maximize efforts on education and to guard against the tendency of becoming largely an emergency or administrative agency. To assure maximum progress on programs of a continuing nature, extension should concentrate on the development of a far greater degree of local thinking and planning. The Cooperative Extension Service, the report concluded, could "make a continually greater contribution to the welfare of both rural and urban people" (120).

Farmers Home Administration Established

The Farmers Home Administration Act, approved August 14, 1946, combined the Farm Security Administration and the Emergency Crop and Feed Loan Division of the Farm Credit Administration. The new organization was named the "Farmers Home Administration." During the 78th Congress, the House of Representatives had authorized a select committee, under the chairmanship of Harold D. Cooley of North Carolina, to investigate the agency. The committee held hearings and reported back to the House with recommendations, and these led eventually to the passage of the bill establishing the new administration.

The law authorized the Secretary to make production and subsistence loans to farmers who could not secure credit elsewhere. These loans were in lieu of the emergency crop, feed, and seed loans, and the rural-rehabilitation loans made previously. The law provided for the continued liquidation of rural-rehabilitation and resettlement projects and for the disposal of farm labor camps. It continued the tenant-purchase program initiated under the

Bankhead-Jones Act of 1937, and authorized a program of insured farm mortgages.²⁰

The Farmers Home Administration devoted much of its resources to loans to veterans during the first few years after the war ended. During the year ending June 30, 1948, over 250,000 families participated in the supervised loan programs of the Administration. About half of these families were borrowers for the first time under these programs; the remainder were borrowers of previous years.

Farm Credit and Cooperative Research

During Clinton P. Anderson's secretaryship, loans to farmers and farmer cooperatives by the associations and banks supervised by the Farm Credit Administration increased substantially each year. The need for larger amounts of credit in farming was due to increased costs, to changes in types of farming, diversifying farm operations, rearranging fields and fences, constructing buildings, and buying needed equipment. Many of these needs had been postponed because of shortages during the war, but many others were necessary to adapt farming operations to the new farm technology which was developing.

The Federal land banks returned the last of the Government-owned capital of \$125 million and paid-in surplus of \$189 million to the United States Treasury in the year ending June 30, 1947. In the same year, the lending authority of the Federal Farm Mortgage Corporation expired. Notable increases in the number of member-stockholders, in the amount and percentage of capital owned by farmers, in the amount of accumulated reserves, and in the amount of credit extended were made by the 503 production credit associations. Generally, the Farm Credit Administration met the increasing sound credit needs of farmers and their marketing and purchasing cooperatives with a constantly decreasing percentage of Federal money (328, 1945-46, 1946-47, 1948).

The Cooperative Research and Service Division of the Farm Credit Administration turned from its emphasis upon helping cooperatives meet wartime needs to research and service for peacetime. With few exceptions, cooperatives made the transition smoothly from wartime to peacetime economy. The Division assisted with specific service projects in 1946. It also jointly sponsored some 75 cooperative clinics with District Banks for Cooperatives, the American Institute of Cooperation, and the American Institute of Accountants. Emphasis was upon the need for improved membership and public understanding of the nature and services of cooperatives and the value of research in charting

a sound course. During 1946-47, 10,125 farmers' marketing and purchasing associations, with an estimated membership of nearly 5½ million farmers, did an estimated business of over \$7 billion (328, 1947-48, p. 179).

The Cooperative Research and Service Division expanded its program with funds available from the Research and Marketing Act of 1946 to include research useful to marketing agencies, but based primarily on information obtained from farmer cooperatives. In 1948, the Division had approximately 50 research projects underway, of which 20 were financed by Research and Marketing Act funds. In addition, the Division was engaged in some 225 service and educational projects (140, pp. 107-116).

Rural Electric Cooperatives

Assistant Secretary of Agriculture Brannan, representing the Subcommittee on Rural Facilities, Services, and Industries of the Department's Policy and Program Committee, said on October 6, 1947:

In the past 12 years a remarkable transformation has been brought about in the number of farms with electricity. From less than 11 percent of all farms having electricity in 1935, there are today more than 55 percent. . . .

More than 25,000 schools and more than 10,000 small rural industries are now served. Yet a comparable enjoyment of the blessings of electrical power with that of urban areas is still far from realized, by and large, in rural communities. . . .

Loan funds should be made available in sufficient quantity to continue the REA-financed construction program until electricity is available in every rural community, together with ample funds for the advisory services REA borrowers need (294, pp. 78, 83).

After the war, the Rural Electrification Administration moved its headquarters back to Washington after 44 months in St. Louis. With the removal of wartime restrictions, the Rural Electrification Administration was flooded with loan applications. Record loan funds were authorized, and more than half as much money was loaned in the first postwar year as had been loaned in the first 10 years of the Rural Electrification Administration's existence. This trend continued.

At the close of the 1946 fiscal year, 918 of the Rural Electrification Administration's 996 borrowers, or more than 90 percent, were locally owned and controlled rural electric cooperatives formed by farmers who wanted central station electric service. This was in keeping with the law establishing the Rural Electrification Administration, which provided for preference to public bodies and cooperatives (349, 1946, 1948).

In the last report he issued as Secretary, and in speeches and testimony, Clinton P. Anderson pointed out that the Nation had seen a revolution in its agriculture. Production for market was up one-third from prewar years, and the revolution was continuing. The Department had to begin planning on that basis.

Secretary Anderson resigned effective May 10, 1948. The basic principles for successful farm program administration, he wrote the day he resigned, included the elected committee system, conservation as an objective, the realization that farm prosperity was vital to national prosperity, and recognition of the necessity to solve production and marketing problems together.²¹

¹ 10 F.R. 8087.

² U.S. Office of Price Administration, Press Release OPA-5892, Sept. 8, 1945.

³ 11 F.R. 12093, 12621.

⁴ 12 F.R. 5485. ⁵ 61 Stat. 35.

⁶ White House, Press Release, Feb. 6, 1946.

⁷ 11 F.R. 1761, 4445. ⁸ 12 F.R. 8875. ⁹ 12 F.R. 4880. ¹⁰ 13 F.R. 79, 81.

¹¹ 12 F.R. 1. ¹² 61 Stat. 769. ¹³ 62 Stat. 1247. ¹⁴ 60 Stat. 230. ¹⁵ 60 Stat. 1082.

¹⁶ 61 Stat. 7. ¹⁷ 61 Stat. 163. ¹⁸ 61 Stat. 177. ¹⁹ 59 Stat. 231.

²⁰ 60 Stat. 1062.

²¹ Letter, Clinton P. Anderson to Ralph S. Trigg, Administrator, Production and Marketing Administration, May 10, 1948, History Branch Files, USDA.



*The American farmer again
met emergency needs.*

The Challenge of Postwar Adjustment, 1948-1953

Charles F. Brannan, a career employee of the Department, became the 14th Secretary of Agriculture on June 2, 1948. The times were uncertain. The Nation faced a national election in less than 6 months. Newspapers were predicting a change in political leadership.

Farm prices and farm income, which had reached a high level in 1947, had begun to decline in 1948, initiated by a collapse in grain prices during the last week of January 1948. The President's Council of Economic Advisers, studying the sharply divergent trends of farm and industrial prices, saw striking similarities between the price patterns of 1948 and 1920, with the possibility that a chain reaction would usher in a depression of catastrophic proportions for the entire economy (274, pp. 34, 38, 47, 69-75, 133-134).

Consumers, particularly those with low fixed incomes, suffered from the continued rise in the cost of living, while farmers became acutely conscious of the decline in farm prices and incomes. Price supports, which along with farm prices had reached high levels during the war, offered a short-time guarantee that farm prices would not drop to the disastrous levels of the late 1920's and the early 1930's. The decline in war- and famine-fed foreign markets for American food products was also painfully similar to the conditions which had followed World War I. Many farm spokesmen, including the new Secretary, believed that farm prosperity was a cornerstone of national prosperity, that national depressions were farm fed if not farm led (312, no. 2606-48).

As Secretary of Agriculture, Charles F. Brannan was a national representative of the farmers, but he was also a member of the President's Cabinet, which must consider the interrelationship of all segments of the economy. As Secretary he would have to reconsider the postwar farm price-support policy which had been recommended at a time when the farm and other sectors of the economy were in better balance.

Uncertainty over change in national political and economic developments was accompanied by uncertainty in international relations. Communist influence in Western Europe seemed to be ebbing. American food as a part of the European recovery program had played an important part in holding back the immediate postwar threat of communism (312, nos. 1264-48, 2154-48).

In this atmosphere of an uncertain economic outlook and an uneasy peace, Charles F. Brannan stepped up from the position of Assistant Secretary to that of Secretary of Agriculture. His identification with and his interest in the day-to-day problems of rank-and-file employees with whom he had worked on common problems gave him unusual opportunities for leadership within the Department. Employees overflowed the patio of the Administration Building, where the swearing-in ceremony was held, to witness the elevation of a career employee to the top position of leadership.

Secretary Brannan was well equipped for leadership within the Department and to serve as a member of the President's Cabinet in a period of uncertainty. As "a devoted New Dealer from the early days of Mr. Roosevelt's administration," he was convinced that the National Government should play a positive role in helping to insure social and economic opportunities for all groups and that President Truman would furnish the necessary leadership (50, pp. 19-21; 312, no. 2154-48).

As Assistant Secretary of Agriculture, he had been given the opportunity of organizing and serving as chairman of study groups of Department experts who analyzed the problems that would confront farmers, Congress, and the Department if foreign markets should disappear and the Nation be threatened with a postwar depression. These problems had been studied with domestic and world food needs as well as farm income in view. They were also studied from the standpoint of the need to conserve the Nation's soil and human resources (294, pp. 2-5).

Secretary Anderson, in April 1947 testimony, had suggested that the basic guide for agricultural planning should be "a national policy of organized, sustained, and realistic abundance" (280, pt. 1, p. 2). Within this framework, on October 6, 1947, Brannan, as Assistant Secretary, had defined the desirable objectives for the long-range program:

First of all, we want an agriculture that will supply all of our people the kinds and quantities of agricultural products to meet our needs. And in return we want the people in agriculture to receive fair prices and income parity. . . .

We believe in striving toward greater efficiency in both production and distribution for the benefit of producers and consumers. We want an improved standard of nutrition and progressively better living standards, with farm families sharing in the general improvement. We want to assure wise use of our agricultural resources—our productive land, water supplies, and our forests—so that these resources will be permanently useful. . . .

Our goal of greater efficiency offers danger, but we as a people are not willing to abandon the objective. . . . In this country, we be-

lieve in family farming as a way of life and as one of the main roots of democracy. We are not willing to sacrifice it. We want to strengthen it. That is one reason for our goal of efficiency. So we shall want to keep the rules of the game fair to the family farm. This does not mean we should favor inefficient units; we should not consider a unit a true family farm unless it is big enough to provide full-time employment for the family and efficient enough to provide the family fair returns for its labor and investment. . . . we as a Nation are also interested in the agricultural advancement of other countries (294, pp. 6-10).

Secretary Brannan's study of long-range planning for American agriculture gave him an opportunity to review all aspects of the Department's program and to relate them to the national economy and to international trends. Moreover, his earlier experience in connection with Government purchase of submarginal land in the Dust Bowl and in helping to resettle farmers from drought-stricken areas had given him a sense of the "overriding importance of conservation," together with "a special interest in the welfare of low-income farmers" (50, p. 20).

In 1949, President Truman gave Secretary Brannan the task of coordinating the first economic report of the executive branch presented to a joint session of Congress. In his introduction to the presentation, Secretary Brannan stated:

The administration is firmly committed to action. The people of the United States, increasingly burdened by rises in the cost of living and harassed by fear of depression, have placed heavy responsibility upon the Administration and this Congress—heavy responsibility for the economic future of all of our people.

If democracy is to live in the world, we must maintain a living democracy in the United States. We can do this only if we have a government which is capable of bold and forward-looking, successful action on the problems that confront it.

Brannan introduced his more specific recommendations on agriculture with a statement emphasizing the interrelationships of all segments of the economy.

It merely reflects these facts: (1) That all segments of our economy are so closely interdependent that the welfare of one cannot be separated from the whole, (2) that agriculture is a truly basic segment of the economy, and (3) that agriculture is already far along the path of abundant production which all parts of the economy must travel if we are to be permanently a strong and prosperous Nation (274, pp. 4-5, 211).

The Secretary and His Staff

The new Secretary, a native of Colorado, was educated in his home State. He was a graduate of the University of Denver Law School. He specialized in irrigation and mining law until joining the staff of the Resettlement Administration in 1935. After 2

years in Resettlement, he served as regional attorney in the Department's Office of the Solicitor for 4 years. Brannan became Regional Director of the Farm Security Administration in 1941, and was called to Washington in 1944 to be Assistant Administrator of the Farm Security Administration. The same year, he became Assistant Secretary. Brannan served as Assistant Secretary from June 21, 1944, to June 2, 1948.

The Under Secretary of Agriculture, Norris E. Dodd, was the first speaker at Secretary Brannan's swearing-in ceremony, but Dodd left the Department a few days later, on June 7, 1948, to become Director General of the Food and Agriculture Organization of the United Nations. He was succeeded as Under Secretary on June 30, 1948, by Albert J. Loveland.

The new Under Secretary, an Iowan, had been active in the Agricultural Adjustment Administration and successor agencies beginning in 1935. Loveland served until March 27, 1950. He was succeeded by Clarence J. McCormick. A native of Indiana, McCormick had had experience in administering agricultural programs from county to national levels. He served to January 20, 1953.

The position of Assistant Secretary, left vacant when Brannan became Secretary, was not filled until August 5, 1949, when Knox T. Hutchinson of Tennessee assumed the post. Hutchinson served to January 20, 1953.

Price Support Legislation and Programs, 1949-1950

Although the Agricultural Act of 1948 was not passed until after Brannan became Secretary of Agriculture, it is discussed in chapter 15, since all hearings had been held and departmental recommendations made while Clinton P. Anderson was Secretary. At about the same time, the Commodity Credit Corporation had been given a Federal charter by the Congress.¹

A provision of the act chartering the Commodity Credit Corporation had prohibited the Corporation from acquiring or leasing storage facilities. The charter was amended on June 7, 1949, to give the Secretary of Agriculture responsibility for supervision and direction of the Corporation, to provide that the Corporation could acquire real property for the purpose of providing adequate storage facilities, and to authorize the barter of commodities acquired by the Corporation for strategic and critical materials produced abroad.²

In January 1949, the congressional Committees on Agriculture began a review of the Agricultural Act of 1948, and initiated hear-

ings on the legislation. The results of the election of 1948 and the compromise nature of the act of 1948 made such a review inevitable. The major point at controversy was whether leading commodities should be supported at a fixed high-level percentage of parity or should be on a flexible scale. Early in 1949, Secretary Brannan organized a seminar to review policy. As a result of these and other studies, the Secretary developed a set of proposals which were to become known as the Brannan plan (50, pp. 21-44).

On April 7, 1949, Secretary Brannan presented his plan to a joint session of the Senate and House Committees on Agriculture. The basic elements of his proposal included: (1) The use of an income standard, based on a 10-year moving average beginning with the years 1938-47, as a method of computing price-support levels for farm products; (2) support for major products, called Group I commodities, at full income standard levels; (3) support of the incomes of growers of perishable commodities by direct payments by the Government of the difference between the price received in the market and the support price established; (4) restriction of supports to large-scale farmers to what an efficient family farm unit could produce; and (5) requirement of compliance with approved conservation practices and production or marketing controls in order to receive benefits (271, Apr. 7, 1949).

The Brannan plan was debated both in and out of Congress. Much of the debate centered about the proposal for supporting the incomes of growers of perishable commodities by direct Government payments when necessary. At the same time, Secretary Brannan's advocacy of support for storable commodities at full income parity levels and of unit limitations aroused much comment. The Brannan plan itself was not adopted by Congress. Instead, the Agricultural Act of 1949, which was a modification of preceding legislation, was approved October 31, 1949.³

The new act set support prices for the basic crops at 90 percent of parity for 1950 and between 80 percent and 90 percent for 1951 if acreage allotments or marketing quotas were in effect. Tobacco, except for fire-cured and dark air-cured types, was to be supported at 90 percent whenever marketing quotas were in effect. If allotments or quotas were not in effect in 1950 and 1951 for any basic crop, its support price was to fall between 75 and 90 percent of parity. After 1951, prices of the basic crops were to be supported at not more than 90 percent, in accordance with the relationship of total supply to normal supply. The act was a compromise between the advocates of price supports at a high, fixed level of parity and supports on a flexible scale.

The modernized parity formula, part of Title II of the Agricultural Act of 1948, was modified in the Agricultural Act of 1949. For basic commodities, the effective parity price, through 1954, was to be the "old" parity price or the "new," whichever was higher. For nonbasic commodities the new parity prices became effective in 1950. For both basic and nonbasic commodities, there

was provision for a gradual transition to the new parity for those commodities for which the new parity was more than 5 percent below the old. The new parity formula was to be used exclusively after 1954.

Wool, tung nuts, honey, and Irish potatoes were to be supported at a level between 60 and 90 percent of parity based on the new formula, while dairy supports were to be between 75 and 90 percent. Other nonbasic commodities might be supported at any level not exceeding 90 percent of parity. The Secretary was authorized to condition eligibility for price support upon compliance with acreage allotments, production goals, and marketing practices. The Secretary was given authority to set higher or lower levels of support under certain conditions.

Potatoes became disproportionately important under price support in 1948, 1949, and 1950. Yields per acre increased greatly, while per capita consumption continued to decline steadily. Inevitably, large quantities of this nonstorable crop were sold to the Government, with resulting criticism of the program. Under legislation then in effect, the Department was forced to offer supports. The Congress, in a law of March 31, 1950, prohibited price support on the crops of potatoes for 1951 and subsequent years unless marketing quotas were in effect, and prohibited price support on the 1950 crop if marketing orders were disapproved.⁴

Price supports for the basic commodities were maintained at 90 percent of parity by law through 1950. Supports for nonbasic commodities were generally at lower levels during 1949 and 1950 than in 1948 whenever this was permitted by law. Price supports for hogs, chickens, turkeys, long staple cotton, peas, and sweet-potatoes were discontinued in 1950.

The production goals announced for 1949 indicated only minor changes from the 1948 livestock production and crop acreage planted. No goals were announced for 1950.

Foreign Trade Programs

The years 1948-50 saw a decline in the oversea demand for American farm products and increasing competition from other nations in both American and foreign markets. The Secretary was very much interested in maintaining foreign markets, and, under the leadership of the Office of Foreign Agricultural Relations, the Department worked on several plans for promoting world trade.

An International Wheat Agreement, approved by the Senate on June 13, 1949, represented an effort to support and stabilize the foreign market for one of our important exports.⁵ The agreement was between the governments of the four wheat-exporting

countries of Australia, Canada, France, and the United States, and 37 wheat-importing countries. It involved the annual trade in 456 million bushels of wheat over a 4-year period beginning August 1, 1949. Prices were established within a fixed range. After new importing countries joined the agreement, the wheat quota was increased.

The Agricultural Act of 1949, approved October 3, 1949, provided in section 416 the first enabling authority for the donation of surplus agricultural commodities to needy persons abroad through United States voluntary relief organizations. Subsequently, this program, administered by the Agricultural Marketing Service, became an important part of our foreign aid.

A Foreign Trade Policy Advisory Committee was established within the Department on November 28, 1949, to advise the Department on foreign agricultural trade and policies. The Committee was composed of representatives of farm organizations, land-grant colleges, the farm press, and the agricultural industry. It held two meetings prior to the outbreak of the Korean war.

The Congress, by amendments to section 22 of the Agricultural Adjustment Act approved June 28, 1950, directed the Department to make the initial studies and recommendations regarding the imposition of import fees or quotas on agricultural commodities when imports materially interfere with domestic programs for agricultural commodities.⁶ These amendments superseded an Executive order which had earlier given the Secretary the same responsibility.

Organization for War

On June 25, 1950, the Republic of Korea was invaded by armed forces from Communist North Korea. The United Nations promptly went to the aid of the invaded nation. Although several countries supported the United Nations with troops and equipment, the major fighting force and its supplies came from the United States. For the next 3 years, this war influenced every aspect of American life, including agriculture.

Neither the extent nor the demands of the Korean war were immediately apparent. The United States had fought many undeclared and limited wars, but at its start it was not clear that this would be such a war. On July 21, 1950, the President asked the Secretary of Agriculture and other agency heads to undertake a detailed review of programs with a view to lessening the demand upon services, commodities, raw materials, manpower, and facilities in competition with those needed for national defense.⁷ The Secretary then asked his agency heads to examine their programs, and to report to him on measures to be taken to comply with the Presi-

dent's request.⁸ One result of the President's request was that steps were taken in the farm housing program to curtail the use of building materials for nondefense purposes and to prevent Government loans from adding to inflationary pressures (312, no. 1806-50).

Congress conferred on the President the basic authority for controlling the civilian economy during the war crisis by the Defense Production Act of September 8, 1950.⁹ Special restrictions controlled the establishment of price ceilings for agricultural products. These included provisions that no ceiling could be established below the parity price or below the highest price received by producers between May 24, 1950, and June 24, 1950.

The day after the Defense Production Act was approved, the President delegated the functions given him to several governmental agencies. The Secretary of Agriculture was made responsible for priorities, allocations, and requisitions respecting food and the domestic distribution of farm equipment and commercial fertilizer.¹⁰

The Secretary of Agriculture, on September 15, 1950, gave, subject to his direction and supervision, the Administrator of the Production and Marketing Administration responsibility for functions respecting food, farm equipment, and fertilizer, and the Chief of the Forest Service responsibility for lumber.¹¹ Subsequently, the authority of the Chief of the Forest Service was redefined as being responsible for liaison and coordination with and advice to other governmental agencies.¹²

The Administrator of the Production and Marketing Administration assigned the responsibilities delegated to him by the Secretary to organizational units within his Administration and announced the establishment of new units to coordinate and supervise defense program activities. New units established were the Office of Requirements and Allocations, the Office of Materials and Facilities, the Administrator's Program Staff, and the Price Staff. The Food Distribution Programs Branch was redesignated the Food Distribution Branch and the Price Support and Foreign Supply Branch was abolished. The Program Management Staff was also abolished.¹³

The Production and Marketing Administration announced the establishment of an Interagency Food Committee on December 6, 1950. The Committee was made up of the Administrator of the Production and Marketing Administration as Chairman, the Director of the Office of Requirements and Allocations as Executive Officer, a staff member of the Office of Requirements and Allocations as Executive Secretary, representatives of the Office of Foreign Agricultural Relations and the Bureau of Agricultural Economics, and representatives of departments and agencies outside the Department of Agriculture concerned with the defense food program. The Committee's primary function was to advise the Administrator of the Production and Marketing Administration

on the food allocation program. Two interagency subcommittees, one each for cotton allocations and sugar and molasses allocations, were also announced.¹⁴

The Korean war itself was fast becoming more than a police action of the United Nations. Chinese Communist troops had intervened on the side of the North Koreans. The President recognized the gravity of the situation by proclaiming the existence of a national emergency on December 16, 1950.¹⁵ At the same time, an Office of Defense Mobilization was established to "direct, control and coordinate all mobilization activities of the Executive Branch of the Government, including but not limited to production, procurement, manpower, stabilization, and transport activities."¹⁶

Price Support and Production Adjustment During the War

The Department's efforts to gear its price support and production adjustment programs to peacetime gave way to a war-directed program with the communistic onslaught on the Republic of Korea. Food and fiber were necessary to meet any eventuality.

Provisions of the Agricultural Act of 1949 had given the Secretary of Agriculture authority to adjust price and acreage programs in accordance with the needs of national security. A national wheat acreage allotment for 1951 was announced July 14, 1950.¹⁷ However, shortly after the President declared a national emergency, the Secretary of Agriculture announced the termination of all wheat allotments in order "to effectuate the declared policy of the act and to meet the present national emergency in food production."¹⁸ Even earlier, the Secretary had proclaimed that no marketing quotas or acreage allotments would be in effect for the 1951 cotton crop.¹⁹ These actions indicated the general pattern for 1951 and 1952. Neither acreage nor marketing controls were in effect for the 1951 and 1952 crops of wheat, rice, corn, dry edible beans, or cotton. Allotments and quotas were in effect for peanuts and most types of tobacco.

The production goals program was reinstated on an active basis, with emphasis upon increases in feed crops, cotton, and special crops needed for defense. The Department hoped that farmers could meet these goals by increased production per acre and by shifts in production, with only a minor expansion in acreage. Actually, acreage in principal crops increased substantially in 1951 over 1950 acreage, and declined in 1952.

Price supports for the basic crops, except for peanuts in 1951, were held at 90 percent of parity during 1951 and 1952 under the national security provisions of the Agricultural Act of 1949.

Prices of oats, barley, rye, and grain sorghums were supported at 75 percent of parity in 1951 and 80 percent in 1952. Naval stores, soybeans, cottonseed, and wool were supported both years at 90 percent, while butterfat was increased to 90 percent for the marketing year beginning April 1, 1951.

Congress, in a law approved July 17, 1952, required that the 1953 and 1954 crops of the basic commodities be supported at 90 percent of parity except where producers had disapproved marketing quotas. The law also made extra-long staple cotton a basic commodity for price-support purposes, and extended through 1955 the requirement that the effective parity prices for the basic commodities should be the higher of the two prices computed under the old and new formulas.²⁰

Meanwhile, the Secretary of Agriculture had taken several steps to encourage farmers to cooperate with the production programs. On February 6, 1951, he gave the Cooperative Extension Service responsibility for an expanded program for the promotion of home gardening and food preservation (312, no. 305-51). This assignment was carried out successfully.

National, State, and county agricultural mobilization committees were established on February 16, 1951. They were to redirect the Department's policies and programs to assure the maximum contribution in the most efficient and least costly manner to the mobilization job. The national committee was made up of the heads of major departmental agencies. Each State committee included the heads of departmental agencies within that State and the members of the Production and Marketing Administration Committee. In addition, the State director of extension, the director of the State agricultural experiment station, the State director of vocational agricultural education, and the State commissioner, secretary, or director of agriculture were to be invited to join the committee. The chairman of the State PMA committee was to act as chairman. The membership of each county committee was to consist of the chief official for the county of each agency or bureau of the Department in that county, and the members of the county PMA committee, with the chairman of the county PMA committee serving as chairman of the county agricultural mobilization committee. The county agent and a representative of the county vocational agricultural teachers were to be asked to join the committee (306, no. 1280).

The Secretary also established an Agricultural Mobilization Policy Board, composed of the members of the advisory committee established by the Research and Marketing Act of 1946 and the members of the advisory committee authorized by the Commodity Credit Corporation Charter Act. The Board was to advise the Secretary concerning mobilization policies and operations.

The production problem was something more than a year-by-year effort to meet goals. Production needed to be coordinated with the other goals of agriculture, and to be related to the facili-

ties available. On May 8, 1951, the Secretary appointed a Department Committee on Analysis of Agricultural Productive Capacity, with Sherman E. Johnson of the Bureau of Agricultural Economics as Chairman (306, no. 1293).

The Association of Land-Grant Colleges and Universities appointed members to the Committee, which, as a whole, was called the Joint Committee on Agricultural Productive Capacity. This Committee asked the State experiment station directors to appoint State productive capacity committees. These committees made State-by-State appraisals of productive capacity and estimates of production that would be attainable by 1955 in a defense period. The Joint Committee then made an analysis for the entire Nation. The report, issued in June 1952, concluded that under specified conditions, farmers could produce about a fifth more of both crops and livestock by 1955 than they did in 1950 (258).

Special Defense and War Assignments

The Department drew upon its staff of experts in many fields to assist farmers in meeting the Nation's needs for food, feed, and fiber during the Korean war. Production adjustment, research, conservation, and credit, as well as a number of special defense and war assignments with which the Department was charged, contributed to the total effort.

The Defense Production Act was amended and extended to June 30, 1952, by an act of July 31, 1951. Several of the amendments related to agricultural commodities. Quotas or limitations on the quantity of livestock slaughtered were prohibited, as were imports of fats and oils, peanuts, dairy products, and rice which would interfere with price-support programs. Ceiling prices for agricultural commodities could not be fixed below 90 percent of the prices received on May 19, 1951, and the ceiling prices for milk or butterfat used for manufacturing were not to be below prices determined reasonable by the Secretary of Agriculture in view of the price of feed and other specified factors.²¹

A year later, on June 30, 1952, Congress again amended and extended the Defense Production Act. Authority for allocations, priorities, requisitions, credit control, and expansion of production was extended a year. Authority for wage and price controls was extended through April 1953. A number of restrictions limited the price and distribution controls which might be imposed on agricultural products. The amendments also provided that price-support loans for basic crops to cooperators should be at 90 percent of parity or higher through April 1953, unless producers had disapproved marketing quotas.²²

Within the framework of the Defense Production Act, its amendments, Executive orders, and delegations, the Department was called upon both to assist other agencies and to carry out special activities designed to aid in the defense and war effort. Thus, the Defense Production Act gave the Secretary of Agriculture responsibility for determining the legal minimum prices below which ceiling prices for agricultural commodities could not be established. The responsibility for determining the actual ceiling prices within these and other limitations in the act was assigned to the Office of Price Stabilization.

On January 26, 1951, the Office of Price Stabilization issued a general ceiling price regulation freezing prices at the highest levels charged from December 19, 1950, to January 25, 1951.²³ However, raw and unprocessed agricultural commodities when sold by the producer, fresh fruits and vegetables, live animals, and a number of other farm commodities were by law exempt from control. The Department of Agriculture issued its list of legal minimum prices the same day the general regulation appeared. Thereafter, it continued to list these prices so long as price controls were in effect.

The Department worked with the Wage Stabilization Board by supplying pertinent information both to local offices of the Board and to farmers. Much of the information upon which the Board based its actions in respect to farm labor was supplied by the Bureau of Agricultural Economics and the Agricultural Mobilization Committees.

The Department also cooperated closely with the Selective Service System to help year-round farmworkers receive the deferments from military service to which they were entitled by law. The State agricultural mobilization committees were responsible for this cooperative work.

On February 26, 1951, the Secretary of Agriculture assigned to the Production and Marketing Administration the responsibility for presenting claims for agricultural manpower and for farm wage adjustments to other Government agencies. To the Cooperative Extension Service was assigned responsibility for educational work to improve the utilization of farm labor, while the Agricultural Research Administration was to do research on laborsaving machinery, facilities, and practices. The Bureau of Agricultural Economics was to carry out research and statistical work on farm labor requirements, farm labor supply, and farm wage rates, earnings, and perquisites (306, no. 1283). At the time these assignments were made, it seemed that labor shortages might hinder securing needed production. Fortunately, both because the war was confined to Korea and because of the work of the responsible agencies, no nationwide farm labor shortage developed.

The Department exercised the priorities and allocation authority assigned it with respect to agricultural products by issuing defense food orders. The first such order, effective April 5, 1951, regulated the distribution and use of castor oil, vital for airplane engines.²⁴

Food orders were also used to direct processors to set aside specified quantities of canned fruits and vegetables for Government purchase.

A defense food order was used to control the imports of specified products. During World War II, food imports had been controlled by War Food Order 63. This was replaced by the Agriculture-Import Order on July 1, 1949.²⁵ The new order was issued under authority of a law of July 1, 1949, extending Title III of the Second War Powers Act.²⁶ Twice extended, this authority expired July 31, 1951.²⁷ Meanwhile, a new order, Defense Food Order 3, had been issued July 1, 1951. On that date, flaxseed, linseed oil, rice, and rice products were controlled.²⁸ The earlier orders had controlled butter and butter oil, and their omission from Defense Food Order 3 aroused protest. The Secretary was directed to control butter, cheese, and other dairy products by the July 31, 1951, amendments to the Defense Production Act if these imports interfered with price-support programs. On August 9, 1951, the Secretary ruled that no commercial imports of peanuts, peanut oil, butter, butter oil, or dried milk solids would be permitted, and that cheese imports would be controlled.²⁹

The Department was responsible for export allocations as well as domestic allocations of agricultural products. Export controls, administered by the Department of Commerce, were recommended by the Department of Agriculture in the case of agricultural products. During the Korean war, the Department of Agriculture made export allocations of and recommended export controls on cotton, sugar, inedible molasses, naval stores, wool, and certain oils.

Neither import nor export controls could insure supplies of certain commodities usually imported. Therefore, at the request of the defense agencies, the Department undertook domestic production and procurement programs for castor beans, guayule, kenaf, and sansevieria. These programs were in the nature of insurance in case imports of these products should be shut off.

Early in the war, as noted previously, the Secretary of Agriculture had been assigned the task of establishing requirements and acting as the claimant for materials and facilities needed for farm production and food processing. After July 1, 1951, much of the claimancy function was carried out through the National Production Authority's controlled materials plan for steel, copper, and aluminum. Claims also were made for materials required for fertilizer, agricultural chemicals, certain container items, and certain supplies not directly under the controlled materials plan. The Secretary assigned two special assistants to develop programs to assure farmers needed fertilizer and farm machinery.

Claimancy operations were carried out by the Production and Marketing Administration after delegations of authority by the Secretary. The work was generally divided into four categories: Submission of requirements for nonfood materials and facilities to the National Production Authority and other defense agencies;

submission of controlled materials requirements directly to the Defense Production Administration for construction of farm, food-processing, and wholesale food-distribution facilities; processing of applications for construction of such facilities; and assistance in obtaining priorities for materials or equipment for farmers, food processors, distributors, and farm- and food-equipment manufacturers.

Studies made at the conclusion of the war show that the Department was successful in its task, and that production suffered in no important respect from shortages of any of the materials necessary for the task. Even in one of the most difficult tasks, increasing the supply of fertilizer available, the Department achieved success. By the fall of 1952, the greatest need in the fertilizer program was to assist farmers in effectively utilizing the abundant supplies.³⁰ The relaxation by 1952 of many controls and the increased productivity of America's farmers permitted renewed attention to conservation programs.

Conserving Our Resources

The Joint Committee on Agricultural Productive Capacity stated in its report of June 1952: "Grassland and conservation systems would be encouraged in all parts of the country through a shift from intertilled to close-growing and sod crops. A higher level diet would be provided through more emphasis on livestock and livestock products." The Secretary and the Department had been emphasizing grassland and conservation agriculture for some time, but now increased productive capacity made it possible to secure needed production and shift land to close-growing and sod crops at the same time.

Early in 1951 Secretary Brannan outlined a program to provide—

. . . the unified and coordinated leadership, service and action needed to meet to the fullest possible extent Department of Agriculture responsibilities regarding soil, water, range, and forest conservation.
. . .

He stated:

The basic physical objective of soil conservation activities by Department agencies shall be the use of each acre of agricultural land within its capabilities and the treatment of each acre of agricultural land in accordance with its needs for protection and improvement (306, no. 1278):

In order to bring about closer coordination of the conservation services, the Secretary directed that the county office personnel of the Soil Conservation Service and the Production and Marketing

Administration be moved into the same county offices as soon as such physical consolidation could be efficiently accomplished. This was a first step in the objective to headquarter all Department of Agriculture personnel having county responsibilities in a single office. The county agents and State agricultural agencies were to be invited to share the offices wherever possible. The State headquarters of Department agencies with statewide responsibilities were also to be consolidated into a single office. Neither the county nor the State consolidations were completed before the memorandum was suspended in 1954 by the new administration.

The State and county employees of the departmental agencies were to jointly determine conservation policies and programs to guide the agencies with program responsibilities. The Soil Conservation Service was made responsible for all technical phases of the permanent types of soil conservation work undertaken by the Production and Marketing Administration. Earlier, on June 29, 1949, Congress, in the Department's Appropriation Act for 1950, authorized the county agricultural conservation committees, with State committee approval, to allot up to 5 percent of their allotments to the Soil Conservation Service for the services of technicians in carrying out the agricultural conservation programs. In 1952, \$1.7 million was transferred for this purpose in 1,100 counties.

On May 11, 1951, a Departmental Grassland Committee, under the chairmanship of a representative of the Secretary, was established to develop ways in which the Department could contribute to the grassland program being carried out by the land-grant colleges and agencies of the Department. At the same time, a Grass and Legume Seed Committee, under the chairmanship of D. F. Beard of the Agricultural Research Administration, was created to mobilize the Department's efforts in the breeding of improved grasses and legumes and in the development of more adequate supplies of adapted seeds (306, nos. 1294, 1295). The movement was given further impetus on May 28, 1951, when representatives of about 60 national farm, business, and scientific organizations met to discuss means of employing grasslands for high-level production of food and fiber (312, no. 1295-51).

A number of additional actions were taken to promote the objectives of conservation during the next year and a half. On July 21, 1952, the Secretary appointed a Department Committee on Agricultural Resources Conservation to assist the Under Secretary in the coordination of conservation activities and policies. This committee was to function as a subcommittee of the Department's Policy and Program Committee (306, no. 1314).

The Soil Conservation Service and the soil conservation districts adopted a "progressive planning" program on April 9, 1951. The new procedure consisted of three stages to enable farmers to start gradually and move progressively into well-rounded conservation

systems on their farms.³¹ By 1952, all needed conservation measures and land use adjustments were completed on more than 27 million acres, with Soil Conservation Service assistance. Farmers continued to organize and operate soil conservation districts under State laws. By January 1, 1953, there were 2,493 districts covering about 85 percent of the Nation's farms and ranches.

Forest conservation made gains during this period. A Division of Forest Fire Research to carry on intensive research in fire control was established within the Forest Service on August 4, 1948. Further recognition that forest fires were more than a local problem came in 1949. Congress authorized a northeastern interstate forest fire protection compact on June 25, 1949.³² The States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York banded together to promote effective prevention and control of forest fires. Interstate forest fire protection compacts were subsequently authorized for the Southeastern, South Central, and Middle Atlantic States. An act of October 26, 1949, supplemented the Clarke-McNary Act of 1924 by increasing the annual authorization for Federal cooperation with the States in forest fire protection. It also extended the authority for cooperation with the States in distributing forest planting stock to owners of all forest lands instead of to farmers alone.³³

The Reforestation and Revegetation Act of 1949, sponsored by Senator Clinton P. Anderson of New Mexico and Representative Mike Mansfield of Montana, provided for more rapid reforestation and revegetation of forest and range lands in the National Forests.³⁴ An act approved April 24, 1950, sponsored by Senator Edward J. Thye of Minnesota and Representative Walter K. Granger of Utah, provided for the establishment and election of local advisory boards for each National Forest or administrative subdivision when a majority of the grazing permittees so petitioned. The act authorized appropriations for range improvements on a per-animal-month use basis, and limited the issuance of grazing permits to a period of 10 years.³⁵

The Cooperative Forest Management Act of August 25, 1950, authorized Federal cooperation with the States to provide technical services to private forest-land owners and operators and processors of primary forest products with respect to forest management and the harvesting, marketing, and processing of forest products. This act superseded the Norris-Doxey Act of 1937.³⁶

The Forest Service carried on research in timber management and utilization, as well as on forest protection at 11 regional experiment stations, at a tropical forestry station in Puerto Rico, at a research center in Alaska, and at the Forest Products Laboratory at Madison, Wis. In 1952, a nationwide Forest Research Advisory Committee was established to advise the Forest Service on its research program.

Research

Research was a foundation stone of the Department in 1862. Through every type of crisis from that date onward it had helped meet the changing needs of agriculture and had aided the American farmer to become the most productive of any in the world.

As in past crises, scientific research was called upon to meet needs growing out of the Korean war. Certain changes in research responsibilities in the Department preceded and accompanied the war. Responsibility for coordinating research had been lodged in the Administrator of the Agricultural Research Administration. The need for further coordination of research activities was recognized by Secretary's Memorandum 1279 of February 15, 1951, which placed all research under the direction of the Assistant Secretary. The Administrator of the Agricultural Research Administration, then P. V. Cardon, was responsible for all agricultural research, except economic, while the Chief of the Bureau of Agricultural Economics, O. V. Wells, was responsible for economic research (306, no. 1279).

The work in soil surveys and in soil, crop, and water management research was reassigned effective November 15, 1952. All soil survey activities were assigned to the Soil Conservation Service. All research in soil and crop management, and in water management on farms related to crop production, was concentrated in the Agricultural Research Administration. This included the soil and water laboratories and related research which had been developed by the Soil Conservation Service in cooperation with the State experiment stations. The Soil Conservation Service, however, was to continue studies in irrigation and drainage engineering directly related to Soil Conservation Service operations (306, no. 1318).

Research is a continuing process. The importation of Landrace hogs and the first work on hog hybridization began in the 1930's. By 1949, research in producing new hybrid hogs had progressed to the point where herd sires from 6 foundation lines were being tested in 20 States. Records of the Bureau of Animal Industry showed that of the new strains being developed, the Landrace-Poland China and the Chester White-Landrace provided the largest yield of the important commercial cuts. An announcement was made during 1949 establishing the Montana No. 1 (Black Hampshire) hog as a new breed. This hog had been developed from crosses made during 1936 of Landrace and Hampshire hogs, and was a joint project of the Montana Agricultural Experiment Station and the Bureau of Animal Industry.

The Department's emphasis upon grassland agriculture pointed up the importance of the continuing research carried on at the regional pasture research laboratory at State College, Pa. Its work emphasized grass for the Northeastern States, but much of its re-

search was applicable to other parts of the Nation. As a result, many farmers had turned to mixtures of grasses which provided better nutrition for livestock and which were more productive than mixtures commonly used.

Beginning in 1950, Department scientists made direct contributions to the war effort. They obtained encouraging results in experiments with flameproof cotton fabrics and participated in a search for a more effective treatment of frostbite. They improved dehydrated eggs, potatoes, and other food, and helped develop more concentrated frozen products. Department scientists helped to develop dextran, a blood plasma replacement.

Many research projects were directed to the Department's major responsibilities during the national emergency; that is, producing, processing, and distributing food. The Secretary, in order to provide a central group to deal with food problems concerning more than one agency, established a Department Nutrition Committee on September 24, 1951. Leadership was assigned to Hazel K. Stiebeling, Chief of the Bureau of Human Nutrition and Home Economics (306, no. 1299). Both the Committee and the Bureau directed attention to the need for insuring adequate nutrition.

The Cooperative Extension Service and the Office of Information continued to carry research results to the farmers. The Secretary appointed a Department Committee on Extension Relationships, under the chairmanship of W. A. Minor, Assistant to the Secretary, on August 16, 1949. The committee was to implement some of the recommendations of the Joint Committee, appointed in October 1946 by the Secretary and the president of the Association of Land-Grant Colleges and Universities, discussed in the preceding chapter (306, no. 1240).

Credit for Low-Income Farmers

The Farmers Home Administration, with funds provided by Congress in the Appropriation Act for 1948, began a program of insured farmownership loans. Most of the insured loans were made by rural banks. The insured loans bore 3 percent interest and, in addition, borrowers were required to pay a 1-percent mortgage insurance charge which made the cost to the borrower the same as that for a direct loan. Farmers obtaining insured loans were given the same supervisory assistance by the Farmers Home Administration as those who borrowed directly from the Government. The main difference was that the insured loan borrower had to establish at least a 10-percent equity in the farm to be purchased; a requirement often difficult for applicants to meet. A large percentage of new direct and insured farmownership loans were made to veterans during the postwar period.

Congress, in 1949, dissolved the Regional Agricultural Credit Corporation.³⁷ The Corporation's revolving fund was transferred to the Secretary of Agriculture for disaster loans to farmers. The Secretary then transferred the assets and personnel of the former Regional Agricultural Credit Corporation to the Farmers Home Administration (*306, no. 1171, supp. 4*).

Farmers were included in the Housing Act of 1949. It authorized loans to help farmers build or repair houses and other farm buildings.³⁸ The program began in the winter of 1949 and continued through 1952. Its administration was assigned to the Farmers Home Administration.

Major emphasis in the Farmers Home Administration during the war years was on helping small farmers make full use of their land and family labor supply in order to produce the food, feed, and fiber needed for defense. Loans were used to purchase operating essentials, to buy family-type farms, or to add more acres to farms already held. The Farmers Home Administration also continued to make loans under the farm housing program and the disaster area program.

Cooperative Activities

The Cooperative Research and Service Division of the Farm Credit Administration helped cooperatives adjust to the decline in cash farm income from 1948 to 1949, and then helped them mobilize for defense after the outbreak of war in Korea. A planning committee within the Division helped guide both research and service activities to meet needs of cooperatives most adequately during the emergency (*140, pp. 116-127*).

Farmers and their cooperatives, if they had a sound basis for loans, found an ample supply of credit available from the cooperative credit system supervised by the Farm Credit Administration. After the war began, the various credit units supervised by the Farm Credit Administration endeavored to avoid speculative loans which might be inflationary, but kept in mind the fact that financing the production and marketing of a large volume of farm products helped prevent scarcity and thereby was anti-inflationary. The amount loaned in 1952 increased considerably over 1951. By the end of 1953, the production credit associations had only \$5.5 million of Government capital compared with a peak of \$90 million, and 283 out of 499 associations were completely farmer owned. Of these associations, 86 paid dividends of \$592,000 in 1953 to member-borrowers and 22 paid patronage refunds of \$297,000. In addition, national farm loan associations, later called Federal land bank associations, paid \$4 million in dividends to member-borrowers.

Secretary Brannan pointed out on March 24, 1952, that a strong relationship existed between the Department and the Nation's system of farmer cooperatives. Cooperatives represented "modernization of the tradition of neighbors working together to help themselves and each other in purely democratic fashion." The Department aimed at "strengthening cooperatives as self-help organizations—membership owned and controlled—whose effective functioning is in the public interest" (306, no. 1307). The Secretary appointed the heads of agencies as members of the Department Committee on Cooperatives (306, no. 1307, *supp.* 1).

Electricity and Telephones on the Farm

In 1944, Senator Lister Hill of Alabama introduced a bill to establish a Rural Telephone Administration, modeled after the Rural Electrification Administration, which had been in successful operation since 1935. Beginning in 1945, both Senator Hill and Representative W. R. Poage of Texas introduced measures in each session of Congress to establish rural telephone loan programs. Action came in 1949, in form of amendments to the Rural Electrification Act, after supporters of the program pointed out that only 38 percent of United States farms had any form of telephone service. The telephone amendments were passed by the Congress and signed into law on October 28, 1949 (351, pp. 6-7).

The first telephone loan was made on February 24, 1950, to an individually owned company in Alabama. The first REA-financed telephone went into service on September 20, 1950, near Fredericksburg, Va. President Truman made the first call on this telephone. Within 10 years, over 1 million farm families had been provided with their first telephone connections by lines built with rural electrification loans.

The electrification loan programs of the Rural Electrification Administration helped provide rural electric power as a factor in more efficient farming. In addition, rural electric cooperatives supplied power to many industrial plants, airfields, radar and weather stations, shipyards, and small rural industries. This was particularly important during the Korean war.

The Rural Electrification Administration was reorganized effective July 1, 1952. Under the new plan, a single point of contact was provided for each electrification borrower, and numerous activities formerly handled in the Administration were transferred to the borrowers. This permitted the transfer of many of the personnel of the Rural Electrification Administration from the electrification to the telephone program.

The Family Farm

Secretary Brannan, speaking of the family farm in 1947, had defined it as a unit "big enough to provide full-time employment for the family and efficient enough to provide the family fair returns for its labor and investment." Three years later, he said:

I am for efficiency of production, and for constantly increasing our efficiency. But I do not agree with those who hold that the only path to efficient production is industrialized mass farming. I want to see no collectives taking over the farms of America—whether those collectives be of the Soviet design or the corporation pattern. I believe the family-sized farm can be efficient, and I believe that we should concentrate our efforts for increased efficiency upon the family-sized farm unit because of the important human values it contributes to our society. I am for encouraging, strengthening, and preserving the family-sized farm as the backbone of American agriculture. . . . (312, no. 422-50).

The Secretary established a Family Farm Policy Review Subcommittee of the Policy and Program Committee in 1950. Under the leadership of Under Secretary Clarence J. McCormick, the subcommittee, including representatives of departmental agencies, of the Department's field force, and of outside organizations, reappraised and reexamined the authorized programs of the Department to ascertain whether or not they were being properly utilized and were fully constituted to serve family farming in the United States. The final report, based upon more than 7,000 meetings and reports from departmental and outside organizations, discussed the ways in which each agency could serve the family farm and made suggestions as to how this service could be improved.

Secretary Brannan, with his interest in both the family farm and in international affairs, summarized the importance of American agriculture, and of this study, in this way:

The American family farm pattern is one of the Nation's main exhibits in the world struggle for men's minds and one of the examples we hold out for all the world to see. We seek to extend the benefits and advantages of our system to rural populations elsewhere. To be successful in this, we should make sure that our own pattern is the best possible one.³⁰

¹ 62 Stat. 1070.

² 63 Stat. 154.

³ 63 Stat. 1051.

⁴ 64 Stat. 40.

⁵ 63 Stat. 2173.

⁶ 64 Stat. 261.

⁷ Letter, Harry S. Truman to Charles F. Brannan, July 21, 1950, History Branch Files, USDA.

⁸ U.S. Department of Agriculture, Secretary's Memorandum to Heads of Department Agencies, Aug. 2, 1950.

⁹ 64 Stat. 798.

¹⁰ 15 F.R. 6105.

¹¹ 15 F.R. 6424.

¹² 16 F.R. 2446.

¹³ U.S. Department of Agriculture, Production and Marketing Administration, Instruction No. 101-3, Sept. 18, 1950.

¹⁴ U.S. Department of Agriculture, Production and Marketing Administration, Instruction No. 108-5, Dec. 6, 1950.

¹⁵ 15 F.R. 9029.

¹⁶ 15 F.R. 9031.

¹⁷ 15 F.R. 4543.

¹⁸ 16 F.R. 277.

¹⁹ 15 F.R. 6779.

²⁰ 66 Stat. 758.

²¹ 65 Stat. 131.

²² 66 Stat. 296.

²³ 16 F.R. 808.

²⁴ 16 F.R. 2970.

²⁵ 14 F.R. 3701.

²⁶ 63 Stat. 405.

²⁷ 16 F.R. 9627.

²⁸ 16 F.R. 6389.

²⁹ 16 F.R. 7934.

³⁰ Memorandum, Charles F. Brannan, Secretary of Agriculture, to Heads of Department Agencies, Sept. 22, 1952.

³¹ U.S. Soil Conservation Service, Chief's Memorandum, Apr. 9, 1951.

³² 63 Stat. 271.

³³ 63 Stat. 909.

³⁴ 63 Stat. 762.

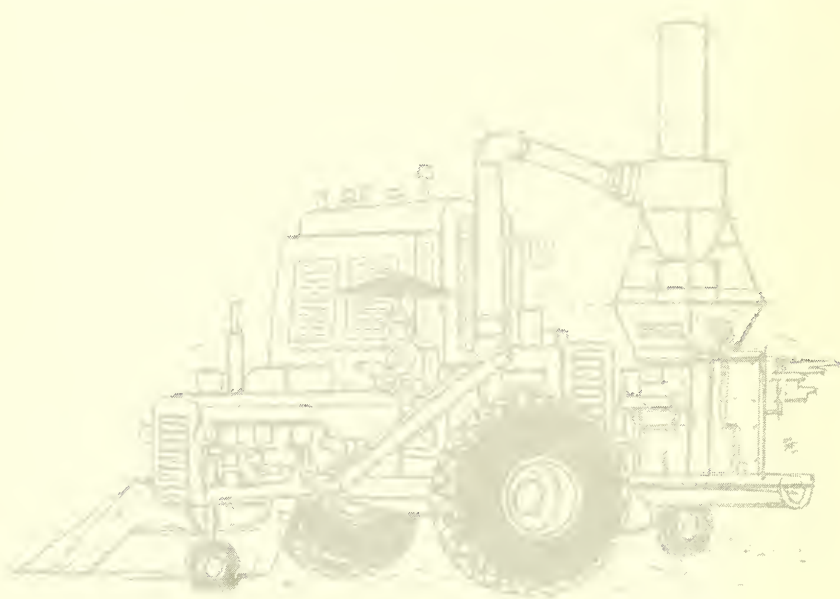
³⁵ 64 Stat. 82.

³⁶ 64 Stat. 473.

³⁷ 63 Stat. 43.

³⁸ 63 Stat. 413.

³⁹ U.S. Department of Agriculture, Summary of the Family Farm Policy Review, Multilithed, Sept. 1952, p. 2.



Technology helped farmers meet goals.

Technological Revolution and the Department, 1953-1960

One farmworker supplied farm products for 17 persons in 1953, for 26 in 1960. The productivity of American agriculture was 6 percent higher than 1947-49 in 1953, 26 percent higher in 1960 (326). This increase was the greatest ever achieved over a similar time period in the United States and was unparalleled anywhere in the world. The success of the American farmer in breaking through previous physical limitations upon production affected every activity of the Department during the 8 years Ezra Taft Benson served as Secretary of Agriculture, even though this was not always emphasized in the carrying out of particular policies and programs.

Ezra Taft Benson took the oath of office as Secretary on January 21, 1953. Two weeks later he issued a "General Statement on Agricultural Policy." The principles in this statement served as goals throughout Secretary Benson's administration.

Perhaps the key to the statement was the sentence which read: "Freedom is a God-given, eternal principle vouchsafed to us under the Constitution." The Secretary then stated that the future of agriculture and the preservation of a sound economic system depended upon the vigorous reemphasis of the principles, benefits, and values of private competitive enterprise. Farmers must have the cooperation of industry and labor, and an income to provide an opportunity for a rising standard of living fairly related to that of other large productive groups. The marketplace should provide full parity prices for farm products and parity incomes for farm people, but guarding of farm levels of living required a program of storage and price supports to help assure stability of income, provide insurance against disaster, and help stabilize national food supplies. The most important method of promoting the longtime welfare of farm people and the Nation lay in the support of adequate programs of research and education in the production, processing, marketing, and utilization of farm products and in rural living. There should be a minimum of restrictions on farm pro-

duction and marketing, and the further development of domestic and foreign markets should be emphasized.

The new Secretary of Agriculture was born on a farm in Idaho, and was educated at Utah State Agricultural College, Brigham Young University, and Iowa State College. He served as a missionary of the Church of Jesus Christ of Latter-day Saints in the British Isles, operated a farm, and was a county agricultural agent in Idaho. Later, while with the extension division of the University of Idaho, Ezra Taft Benson was instrumental in organizing the Idaho Cooperative Council. He then became the executive secretary of the National Council of Farmer Cooperatives, where he served until he became a member of the Council of Twelve of the Church of Jesus Christ of Latter-day Saints. He was on leave of absence from the church responsibility while serving as Secretary of Agriculture.

The new Under Secretary, who was to serve 8 years with Secretary Benson, was True D. Morse, formerly president and chairman of the board of Doane Agricultural Service, St. Louis, Mo. Morse was born on a Missouri farm and graduated from the University of Missouri.

The new Assistant Secretary of Agriculture, J. Earl Coke, had been State extension director in California. A native of California and a graduate of the University of California, Coke had also been vice president of the Spreckles Sugar Co. Coke served as Assistant Secretary of Agriculture until November 14, 1954 (312, no. 174-53).

Departmental Reorganization

In his statement of goals, Secretary Benson said that the Department of Agriculture "should improve its organization in accordance with sound principles of public administration and practice, strict efficiency and economy." His first action upon assuming office was to group the Department's agencies and functions. Agency and office heads within each group were to report to their respective group head. The group heads and the Solicitor were to report on all functional and operating matters to the Under Secretary, and were to consider matters of policy determination with the Secretary and Under Secretary (306, no. 1320).

The Research, Extension, and Land Use group reported through the Assistant Secretary. The Commodity Marketing and Adjustment group reported through John H. Davis as Director of Commodity Marketing and Adjustment. Davis was general manager of the National Wool Marketing Corporation at the time of his appointment, and from 1944 to 1952 was executive secretary of the National Council of Farmer Cooperatives. He had succeeded Secretary Benson in this post. Born in Missouri, he had been

trained in agricultural economics at Iowa State College and the University of Minnesota. The Agricultural Credit group was headed by Romeo E. Short. Short was an Arkansas farmer and farm organization leader. He had served as president of the Arkansas Farm Bureau for 12 years and as vice president of the national organization for 6 years.

The Departmental Administration group included the Hearing Examiners, Library, Office of Budget and Finance, Office of Information, Office of Personnel, and Office of Plant and Operations. The group was headed by Richard D. Aplin. Aplin was serving as administrator of the Federal milk marketing orders for the Greater Boston and three other Massachusetts milk marketing areas when he came to Washington. A graduate of the University of Vermont, Aplin had been identified with milk marketing in the Northeastern States for most of his career.

The Solicitor's Office was not included in the groupings. On March 10, 1953, the Office of Foreign Agricultural Relations became the Foreign Agricultural Service, which was independent of any group. The new Service was headed by Romeo E. Short. He was succeeded in his earlier post by Robert L. Farrington, who became Acting Director of Agricultural Credit (306, no. 1320, *supp. 1*). Farrington, who was serving as Cooperative Bank Commissioner in the Farm Credit Administration, had had many years of experience in responsible positions in the Farm Credit Administration and in the Office of the Solicitor of the Department.

The independent position of the Foreign Agricultural Service was an indication of the emphasis being given the development of foreign markets.

The groupings were a temporary measure until a more thoroughgoing reorganization of the Department could become effective. The President submitted a plan to Congress, Reorganization Plan No. II of 1953, for the reorganization of the Department, on March 25, 1953. The plan transferred all functions of the Department to the Secretary, except those of the Hearing Examiners under the Administrative Procedure Act, the corporations of the Department, the Advisory Board of the Commodity Credit Corporation, and the Farm Credit Administration. Two additional Assistant Secretaries of Agriculture were to be appointed by the President, by and with the consent of the Senate, and an Administrative Assistant Secretary was to be appointed, with the approval of the President, by the Secretary of Agriculture under the classified civil service. The position of Administrative Assistant Secretary was to permit continuity in changes of administration. The Secretary was to be authorized to make such provisions as he deemed appropriate within the Department to carry out his functions, except that when major functions were assigned, the Secretary was to give advance public notice and afford an opportunity for those interested to make their views known (271, *Mar. 25, 1953*).

The Senate and the House of Representatives held hearings on

the plan. It was first approved by the Senate, and, after some debate, by the House of Representatives. The plan became effective June 4, 1953.¹ The Secretary immediately ordered all functions and duties continued as they had been before the plan was to become effective, though some changes actually were made before the announcement, on October 13, 1953, of plans for a major reorganization.²

On July 13, 1953, Richard D. Aplin was appointed as the Department's first Administrative Assistant Secretary. He served in this position until August 31, 1953, when he was succeeded by Ralph H. Roberts. Roberts, who served in the post from September 1, 1953, to February 20, 1961, had entered the Government service in 1928, and had been in the Department of Agriculture since 1941, most recently serving as head of the Office of Budget and Finance (*312, no. 2159-53*).

The Senate confirmed the nominations of John H. Davis and Romeo E. Short as Assistant Secretaries of Agriculture on July 16, 1953. The two were sworn into their new positions on July 21, 1953. Short resigned effective September 27, 1953. Assistant Secretary Davis was assigned responsibility for the Foreign Agricultural Service and gave up responsibility for the commodity marketing and adjustment work (*312, nos. 1749-53, 2367-53*).

The Farm Credit Administration, by the Farm Credit Act of 1953, approved August 6, 1953, became an independent agency of the executive branch of the Government, effective December 4, 1953. A 13-member Federal Farm Credit Board was established as a part-time policymaking body for the independent Administration. The 13th member of the Board was to be appointed by the Secretary of Agriculture.³

The plans for a major reorganization of the Department were announced by the Secretary on October 13, 1953. The reorganization, effective November 2, 1953, grouped all the service agencies of the Department and transferred the functions of the former research bureaus of the Agricultural Research Administration, the Bureau of Agricultural Economics, and the Production and Marketing Administration to new or reorganized services. The Regional Soil Conservation Service offices were eliminated (*306, no. 1320, supp. 4*). The Cooperative Research and Service Division remained in the Department where it became the Farmer Cooperative Service.

The Federal-States Relations group included the Agricultural Research Service, Forest Service, Soil Conservation Service, Federal Extension Service, Agricultural Conservation Program Service, and Farmer Cooperative Service. Duties newly assigned to the Agricultural Research Service included research on farm management and costs, land economics, and agricultural finance, all formerly in the Bureau of Agricultural Economics; soil conservation research, formerly in the Soil Conservation Service; range management, grass, and certain plant research from the Forest Serv-

ice; cotton ginning research from the Production and Marketing Administration; and the administration of the Insecticide, Fungicide and Rodenticide Act from the Production and Marketing Administration. The Forest Service was assigned the management of certain public lands formerly managed by the Soil Conservation Service, and forest disease and pest research and control work formerly carried out by the Agricultural Research Administration.

The Federal-States Relations group was headed by Assistant Secretary J. Earl Coke, who served until November 14, 1954. He was succeeded by Ervin L. Peterson, who had been director of the Oregon State Department of Agriculture since 1943. Prior to that, Peterson had been a dairy farmer and active in farm organizations. Peterson served from November 15, 1954, to September 16, 1960. He was succeeded by Clarence M. Ferguson, who served from September 17, 1960, to January 20, 1961. Ferguson had been Administrator of the Federal Extension Service since 1953, and previously had been director of the Ohio Agricultural Extension Service.

The Marketing and Foreign Agriculture group was made up of the Agricultural Marketing Service, the Foreign Agricultural Service, and the Commodity Exchange Authority. The new Agricultural Marketing Service was given a major part of the marketing, research, and service functions of the Production and Marketing Administration and many of the functions of the Bureau of Agricultural Economics. The off-farm handling, transportation, and storage research activities of the Agricultural Research Administration were also assigned the new agency. The administration of Section 22 of the Agricultural Adjustment Act, which authorized import control under certain conditions, and other import and export controls, formerly handled by the Production and Marketing Administration, were assigned to the Foreign Agricultural Service.

The Marketing and Foreign Agriculture group was under the direction of Assistant Secretary John H. Davis, who also was responsible for the Agricultural Stabilization group. Davis served until July 31, 1954. On August 2, 1954, Earl L. Butz of Purdue University became Assistant Secretary and was assigned responsibility for the Marketing and Foreign Agriculture group. Born on a farm in Indiana, Butz was educated at Purdue and became head of that university's department of agricultural economics in 1946. Butz resigned as Assistant Secretary effective July 31, 1957, to return to Purdue as dean of the school of agriculture, director of extension, and director of the experiment station (312, no. 2124-57). Butz was succeeded by Don Paarlberg, who had been serving as Economic Adviser to the Secretary. Paarlberg grew up on a farm in Indiana, was educated at Purdue and Cornell Universities, and taught agricultural economics at Purdue. He served as Assistant Secretary until October 7, 1958, and left the

Department to become Economic Adviser to the President. On December 22, 1958, Clarence L. Miller became Assistant Secretary—Miller had served the Department for a number of years in important positions. Born and educated in Kentucky, he had operated a farm in that State for 28 years. He served as Assistant Secretary until January 20, 1961.

The Agricultural Stabilization group in the reorganization included the Commodity Stabilization Service, Federal Crop Insurance Corporation, and Community, County and State Committees. The Commodity Stabilization Service was the successor agency to the Production and Marketing Administration, and was responsible for its price-support and adjustment activities. The Community, County, and State Committees were the former Production and Marketing Administration Committees through which stabilization activities and the agricultural conservation program were carried out in the field. The Community, County, and State Committees were identified as Agricultural Stabilization and Conservation Committees, effective November 9, 1953.⁴ Effective January 2, 1954, administrative supervision and direction of the Agricultural Stabilization and Conservation State and county offices were assigned to the Commodity Stabilization Service.⁵

John H. Davis headed the Agricultural Stabilization group until Ross Rizley became Assistant Secretary on December 17, 1953. Rizley, born in Oklahoma, had practiced law in that State for many years, and had served in Congress. He held his new position in the Department until December 16, 1954. On January 24, 1955, James A. McConnell, who had been Administrator of the Commodity Stabilization Service, became Assistant Secretary. McConnell operated a farm in Pennsylvania and for 16 years was general manager of the Grange League Federation Exchange. McConnell served until December 31, 1955. He was succeeded by Marvin L. McLain, who was Assistant Secretary from January 30, 1956, to November 30, 1960. A graduate of Iowa State College, McLain had farmed and had been chairman of the Iowa State Agricultural Stabilization and Conservation Committee before joining the Department in 1953.

The Farmers Home Administration and the Rural Electrification Administration, which made up the Agricultural Credit group after the Farm Credit Administration became an independent agency, were not affected by the reorganization. The group was headed by Robert L. Farrington, who served until he was appointed Solicitor. On March 15, 1954, Kenneth L. Scott, then Deputy Director of the Production Credit Service of the Farm Credit Administration, was appointed to succeed Farrington as Director of the Agricultural Credit Group (*§12, no. 691-54*).

The Departmental Administration group was not affected by this reorganization. It continued under the direction of Ralph H. Roberts, Assistant Secretary for Administration.

Among the most controversial aspects of the reorganization

were the disappearance of the scientific bureaus as organizational entities, the breaking up of the Bureau of Agricultural Economics, and a series of changes in the organization and operation of the Agricultural Stabilization and Conservation Committees and their offices. The breakup of the Bureau of Agricultural Economics was the subject of a symposium and other articles in the *Journal of Farm Economics* (386).

The changes in the Agricultural Stabilization and Conservation Committees, some of which had been made prior to the general reorganization, were strongly opposed by many farm leaders and heartily supported by others. A statement of policy for State committeemen, issued March 20, 1953, indicated that each nomination must be accompanied by a report on the acceptability of the nominee to heads of State farm organizations, dean of agriculture in the land-grant college, director of extension, State commissioner of agriculture, and other agricultural leaders in the State. The appointment by the Secretary of Agriculture was for a period of 1 year, and a rotation system was to be established. Committeemen were to be paid for days actually employed, and were subject to removal from office by the Secretary of Agriculture. The State committee was to determine program and administration policy, but the execution of such policies was to be carried out by its employees under the direction of a State executive officer, employed by but not a member of the committee.⁶ A similar separation of duties was announced for county committees (312, no. 687-53). Subsequently, limits were placed on the number of days each year on which State committeemen could be employed. On June 15, 1954, the Secretary of Agriculture announced that county and local committeemen would be restricted to serving not more than three consecutive terms without a break, and that elections would be conducted by county and community election boards. The county election board was composed of the county agricultural extension agent as chairman, the heads of the Soil Conservation Service and Farmers Home Administration offices in the county, and the county head of each general farm organization operating in the county. County committeemen could not be officials of general farm organizations nor could they serve as employees in their own county offices.⁷ The limitation of 3 years of consecutive service was subsequently removed.

Secretary Benson stated on March 25, 1953, that the changes would result in substantial savings. The State and county committees, he said, would serve as a "board of directors" to determine policy, with the office manager carrying out program details. This meant to some critics that the Secretary was relegating the farmer committees to an advisory position. The committees, said the critics, were forced to operate on an inflexible pattern set by officials in Washington. It then became possible to do away with local control and administration of farm programs, making them entirely subject to direction from the Department in Washington.

However, Secretary Benson stated that "The revised regulations are designated to strengthen farmer control of local program administration, to stimulate more extensive farmer participation in community elections, and to encourage more farmers to serve as community and county committeemen" (312, no. 1538-54).

The controversy led to the introduction into Congress of several bills to change the Secretary's regulations regarding the committees, and extensive hearings were held on the problem in 1956. The Senate Committee on Agriculture and Forestry issued a report on the subject (296, 297).

During the next few years, other changes were made in different agencies of the Department, but no further departmentwide organization occurred. On November 19, 1953, for example, poultry inspection was transferred from the Commodity Stabilization Service to the Agricultural Marketing Service.

On April 1, 1954, Secretary Benson announced a reorganization of the Department's information work. The work of the Office of Information was grouped into the three general activities of current information, publications, and visual work; a more clear-cut policy of control of all publications issued by the Department was established; visual information work was centralized; and agency information offices were relieved of work not informational in character. The Secretary's emphasis was upon reducing the volume of publications and upon closer collaboration between the Department and the land-grant colleges in publication. A Department Publication Review Committee, headed by Assistant Secretary J. Earl Coke, was to

. . . give especial attention to the problem of integrating Department publications with the needs and publications programs of the Land Grant Colleges and with those of private industry in agriculture and related fields. The committee will study the desirability and practicability of putting a larger proportion of the Department's publications on a sales basis, of combining existing publications when advisable, and of eliminating publications of limited or dubious value (306, no. 1348).

Jurisdiction over the United States agricultural attachés was returned to the Department of Agriculture on September 1, 1954, by the Agricultural Act of 1954.⁸ They had been transferred to the Department of State in 1939. In signing the act, the President stated that the attachés were being shifted to the Department of Agriculture "in order to sharpen the effort to find new world markets for our agricultural products."

On March 17, 1955, the title of the Solicitor was changed to General Counsel (306, no. 1374). On January 7, 1957, an Office of Administrative Management was established as a staff office. This new Office, under the direction of the Administrative Assistant Secretary, was to provide general direction in the fields of organization, work methods, and management in the Department (306, no. 1409).

On July 1, 1959, the centralization of library services was reversed when agency-administered libraries were authorized at the Department's research laboratories and the Forest and Range Experiment Stations (306, no. 1431).

A number of changes took place within the services. Early in 1955, the proposal was made within the Agricultural Research Service to concentrate home economics research on problems of food and human nutrition. The proposal was reviewed by a 15-member home economics research committee, which suggested that the current program, including research on clothing and household equipment, be expanded. The work was to be carried on by three divisions: The Human Nutrition Research Division, the Clothing and Housing Research Division, and the Household Economics Research Division.⁹ On February 21, 1957, the Department announced that the three divisions were being grouped together in a new Institute of Home Economics. At the same time, the work in the development of new uses for agricultural products and farm production research functions were regrouped within the Agricultural Research Service under Deputy Administrators.¹⁰

End of Korean War

The end of the Korean war resulted in some organizational and program changes. The Office of Materials and Facilities and the Office of Requirements and Allocations were abolished September 30, 1953, while the Agricultural Mobilization Committees were abolished December 22, 1953 ¹¹ (306, no. 1343). However, even though the Korean war had come to an end, the threat of powerful dictatorships to American freedom made it imperative to maintain strong defenses. A Mobilization Activities Branch was established in the Production and Marketing Administration on October 1, 1953, to carry out defense production and mobilization activities with respect to food and agriculture. This function remained with the Commodity Stabilization Service after the reorganization of November 2, 1953, although other agencies of the Department also took part in mobilization planning.

By the time the armistice ending the Korean war was signed on July 27, 1953, regulations governing the prices of agricultural products had been removed. The Secretary of Agriculture stated on January 29, 1953, that he was doing everything possible to secure the removal of price controls on meat (312, no. 213-53). These controls were removed on February 6, 1953, by the Office of Price Stabilization.¹² On the same day, the National Production Authority revoked its regulations governing cans and tinplate.¹³ Week-by-week additional controls were removed until on March

17, 1953, all sales of all commodities and services were exempted from price control.¹⁴

Orders limiting inventories of specified agricultural products were also modified and removed. Limitations on the use and holdings of castor oil were removed on April 1, 1953.¹⁵ The order requiring packers to set aside specific quantities of canned food for Government purchase continued through 1953, and was terminated April 1, 1954 (*312, no. 729-54*).

The export and import of agricultural products had been controlled to some extent during the Korean war. An order of the Defense Transportation Administration controlling grain-loading facilities in American ports was suspended March 9, 1953, and revoked July 1, 1953.¹⁶ This action was taken upon the recommendation of the Department of Agriculture. Export allocations on rice, one of the last commodities to be controlled in this way, were discontinued effective October 23, 1953 (*312, no. 2608-53*).

Agricultural imports were controlled by Defense Food Order 3 until its revocation, effective July 1, 1953. It was replaced by Import Regulation 1, issued under authority of Section 22 of the Agricultural Adjustment Act.¹⁷ Defense Food Order 3 was first issued as War Food Order 63 during World War II. Its purpose was to help regulate the flow of important agricultural commodities among the nations engaged in the war. In later years the order became controversial in that some of our Allies charged that it was used to exclude their products, particularly dairy products and fats and oils, from the American market.

Defense Planning

While the programs directly connected with World War II and the Korean war were being brought to a close, other responsibilities were given to the Secretary of Agriculture. The President, by Executive Order 10480 of August 14, 1953, assigned priority and allocation planning functions respecting food and the domestic distribution of farm equipment and fertilizer and the purchasing of food and plant fiber to the Secretary.¹⁸ These planning responsibilities were outlined in greater detail and others were assigned by orders of the Office of Defense Mobilization and the Federal Civil Defense Administrator. In October 1958, the President issued a National Plan for Civil Defense which also assigned functions to the Secretary of Agriculture.

The emergency planning activities included maintaining an emergency relocation center for the Department, planning food-related activities, and carrying out research in defense against biological and chemical warfare on crops and animals, radiological

monitoring, and rural fire protection. In the event of a civil defense emergency or an attack on the United States, the Cooperative Extension Service was to consider itself an integral part of the Department of Agriculture for the purpose of carrying out the Department's continuing and delegated emergency responsibilities. This work was drawn upon in developing major sections of a National Plan for Civil Defense and Defense Mobilization.

Price Support and Production Control

The end of the Korean war also necessitated changes in price support, production control, and related programs. On December 28, 1952, President-elect Eisenhower asked a group of farm leaders to advise the incoming Secretary on agricultural policy and the administration of farm programs. The group, appointed informally as an Agricultural Advisory Committee, was established on a permanent basis on July 20, 1953, as the National Agricultural Advisory Commission.¹⁹ The Secretary also asked farmers, farm leaders, and others for their advice, and, meanwhile, took such actions as were possible to limit production.

On February 19, 1953, Secretary Benson urged farmers to avoid overproduction of cotton by reducing acreage by about one-fifth (312, no. 405-53). He proclaimed marketing quotas for the 1954 crops of wheat and cotton on July 1, 1953, and October 9, 1953, respectively.²⁰ The major types of tobacco and peanuts continued under marketing quotas. However, quotas were not imposed on feed grains. In 1954, the Department announced that farmers must be in "cross-compliance" with respect to total acreage allotments to receive price supports in 1955 but rescinded this requirement a few months later.

Acting upon the advice of the Dairy Advisory Group and others, the Secretary announced on February 27, 1953, that dairy prices would be supported at 90 percent of parity until April 1, 1954. He said that

. . . a primary reason for continuing the maximum support allowed by the law was assurance from the dairy advisors that the industry would immediately start work on programs to reduce to a minimum governmental support purchases (312, no. 467-53).

Supports were continued at 90 percent of parity for the 1953 and 1954 crops of basic commodities, in accordance with an act of July 17, 1952, with the result that an additional \$4.6 billion was invested in commodity stocks between June 30, 1952, and June 30, 1954. The reasons for the \$4.6 billion increase have been debated.

It was said that the law setting supports at 90 percent was adopted to prevent possible wartime or postwar shortages of food and fiber such as occurred after World War II, and that this increase might well be regarded as war insurance.

The Agricultural Act of 1954, approved August 28, 1954, established price supports for the basic commodities on a flexible basis, ranging from 82.5 to 90 percent of parity for 1955 and from 75 to 90 percent thereafter, except for tobacco, which was to be supported at 90 percent of parity when marketing quotas were in effect.²¹ The idea of flexible supports was not new, having been first enacted in 1938. The transition to flexible supports was to be eased by "set-asides" of basic commodities. Not more than specified maximum nor less than specified minimum quantities of these commodities were to be excluded from the "carryover" for the purpose of computing the level of support. Special provisions were added for various commodities, one of which was the requirement that wool be supported between 60 and 110 percent of parity, with payments to producers authorized as a method of support. This method of support was in effect for wool the remainder of the Benson administration.

Both the cost of price support and the amounts of commodities under loan continued to increase in 1955 and 1956. Congress enacted a bill early in 1956 to provide price supports at 90 percent of parity for basic crops, but the bill was vetoed by the President. The Agricultural Act of 1956, approved May 28, 1956, established a Soil Bank in an effort to reduce surpluses by removing land from production.²² The new act also provided that price supports for corn were to be subject to a referendum in which the growers would adopt either (1) base acreages in lieu of acreage allotments with supports at a level to be determined by the Secretary, or (2) acreage allotments with price support at 70 to 90 percent of parity. The Secretary was given discretionary authority to establish a two-price system for rice for a 2-year period, but this authority was not exercised.

In 1957, the Secretary of Agriculture recommended to Senator Allen J. Ellender of Louisiana and Representative Harold D. Cooley of North Carolina, chairmen of the Senate and House Agriculture Committees, that price supports for the basic crops be set at between 60 and 90 percent of parity. No action was taken on this recommendation. However, on August 28, 1957, the President approved a law exempting farmers with up to 30 acres of wheat from marketing penalties, provided the entire crop was used on the farm where it was grown.²³

In 1958, the President recommended that supports be set at 60 to 90 percent of parity. Congress, instead, passed a joint resolution freezing existing price supports and acreage allotments, which the President vetoed. Later, Congress passed the Agricul-

tural Act of 1958, which the President approved August 28, 1958. This law made innovations in the cotton and corn support programs.²⁴ For 1959 and 1960 each cotton farmer was to choose between (a) a regular acreage allotment and price support, or (b) an increase of up to 40 percent in allotment with price support 15 points lower than the percentage of parity set under (a). After 1960, cotton was to be under regular allotments, supported between 70 and 90 percent of parity in 1961 and between 65 and 90 percent after 1961.

Corn farmers were given the option of voting either to discontinue acreage allotments and to receive supports at 90 percent of the average farm price for the preceding 3 years but not less than 65 percent of parity, or to keep acreage allotments with supports between 75 and 90 percent of parity. The first proposal was adopted for an indefinite period in a referendum held November 25, 1958 (312, no. 3334-58).

The first year in which acreage allotments were removed, 1959, saw a marked increase in acreage planted to corn. The next year, acreage declined somewhat, but was second only to 1959 among the preceding 10 years. The removal of allotments was, however, not the only factor in the increase. The Congress terminated the acreage reserve section of the Soil Bank effective in 1959.²⁵ This released some 7 million acres, most of which, according to Secretary Benson, went into corn. The supports on corn were somewhat higher proportionately than they were on other feed grains, and thus led farmers to shift some acreage to corn (283, 1961, pt. 3, p. 157). Some authorities on agricultural programs have also suggested that many farmers increased their corn acreages in order to insure large bases if acreage allotments were restored at some future time.

In spite of Secretary Benson's hopes of reducing the costs of the farm programs while freeing farmers of some of the restrictions under which they operated, the price-support programs cost more year by year. In 1952, the Department's expenditures totaled \$1.2 billion; in 1959, \$7.1 billion (283, 1961, pt. 3, p. 145). The realized cost of programs primarily for the stabilization of farm prices and income was \$288.6 million in 1952, and \$2,027.9 million in 1959.²⁶ The cost of storing and handling stocks of commodities in connection with price support was \$73,259,000 in 1952 and \$481,659,000 in 1959.

In 1960, the Department made a reduction of 19 percent in rates for handling and storing price-support grain. A study had indicated that it was no longer necessary to hold rates at levels high enough to encourage the construction of new facilities, and that the level of occupancy and length of time grain remained in storage justified the lower rates (283, 1961, pt. 3, pp. 387, 658-671).

The Soil Bank

The Soil Bank, established by the Agricultural Act of 1956, was a large-scale effort, similar in some respects to programs of the 1930's, to bring about adjustments in the supply of agricultural products by taking farmland out of production. The program was divided into two parts: an acreage reserve and a conservation reserve. The specific objective of the acreage reserve was to reduce the amount of land planted to wheat, cotton, corn, tobacco, peanuts, and rice. Under its terms, farmers cut land planted to these crops below established allotments, or, in the case of corn, their base acreage, and received payments on such acreage. In 1957, 21.4 million acres were in the acreage reserve. The program came to an end in 1959, in accordance with a law of June 13, 1958.

All farmers were eligible to participate in the conservation reserve by designating certain cropland for the reserve and putting it to conservation use. Payments under this plan were of two types; a one-time payment for carrying out a conservation practice, and an annual cash rental payment for a stated period. A major objection to this plan in some areas was that entire communities were disrupted when many farmers placed their entire farms in the conservation reserve. On July 15, 1960, 28.6 million acres were under contract in this reserve. However, largely because of the continuing technological explosion in production, the Soil Bank did not result in overall decreases in the supply of farm commodities. The program did not displace the longtime agricultural conservation program, in which the emphasis in this period was upon the cost-sharing of conservation practices rather than upon retirement of land from production.

Crop Insurance

Crop insurance, discussed in earlier chapters of this history, is an important method of reducing risks in agriculture (193). In 1953, Congress provided for its continued expansion on a gradual basis. Operating costs were borne by the Government, but beginning with the 1955 fiscal year, Congress authorized the charging of some costs against premium income. One or more crops were insured in 830 counties during 1958. In these counties, about 300,000 producers were insured on one or more crops.

In 1959-60, the direct costs of loss adjustment and a limited part of the administrative and operating costs were charged against premium income, but were not taken into consideration in computing premiums. The crop year of 1960 was the fourth consecutive year in which premiums exceeded indemnities.

Research and Market Services

Secretary Benson's emphasis upon adequate programs of research was reflected in the increase of appropriations for this work in 1960 by 168 percent over 1953. The Secretary saw the further development of markets as permitting fewer restrictions on farm production and marketing. Thus, there was expansion in both physical and economic research as applied to marketing as well as in other areas.

Marketing research and services were placed in the newly established Agricultural Marketing Service in 1953. By 1960, appropriations for marketing research totaled \$7.3 million, nearly double the 1953 figure. During that period of time, work on improved packing and handling of perishable fruits and vegetables produced savings to growers and consumers of over \$7 million a year. Grain aeration, developed with the help of marketing research, was important to the growers, elevator operators, and consumers. Better cotton warehousing methods and handling equipment were developed by the Department's marketing specialists. Research helped develop new terminal markets in a number of major cities, saving the public in marketing costs and improving the quality of products that reached the consumer.

The market news service was expanded to 58 additional fruits and vegetables between 1953 and 1960, and was improved for poultry, livestock, and dairy products. During 1960, poultry inspected for wholesomeness totaled almost 5 billion pounds. The number of poultry-processing plants under inspection increased from 254 in 1953 to 548 in 1960. The amount of poultry, dairy products, and beef graded by Federal graders increased markedly. The proportion of the cotton crop classed for farmers increased from 65 percent in 1953 to 95 percent in 1960.

Although the production of agricultural products under the impetus of new farm technology was increasing as too rapid a rate to permit research and marketing services to solve the problems of surpluses, these activities aided farmers and helped bring consumers adequate supplies of wholesome farm products at reasonable prices (384).

Regulation of Futures Trading

The Commodity Exchange Authority continued to enforce the Commodity Exchange Act, and thus helped maintain fair and competitive pricing in the commodity futures market. This included maintaining a market data service to the public, and, when

advisable, issuing special reports on the commodity market. A special report on *Soybean Future Trading, 1959-60*, issued in 1960, was of use to traders, analysts, economists, and others.

Aiding Farmer Cooperatives

The establishment of Farmer Cooperative Service as a separate agency reflected growing recognition of the idea that cooperatives were an important instrumentality of farmers in marketing their products and obtaining necessary production supplies and services. Moreover, there was increased appreciation that the Department should assist farmers in their business efforts in much the same way it provided technical assistance in problems of production.

The importance of cooperatives to American farmers was shown by the fact that in the midfifties, four farmers out of five were members of marketing, purchasing, or service cooperatives. In 1959-60 the approximately 9,300 marketing and purchasing associations marketed \$9.3 billion of farm products and provided \$2.4 billion of production supplies. Thus at one stage or another of the marketing program, 25 percent of the farmers' products moved through cooperative associations, and \$1 out of every \$7 that farmers spent for production supplies was spent through their cooperatives. In addition, mutual fire insurance companies, rural electric cooperatives, irrigation companies, and various types of credit associations also served very substantial numbers of farm people.

After Congress transferred the Cooperative Research and Service Division to the Department in the course of making the Farm Credit Administration an independent agency, the importance of cooperatives was given further recognition by the establishment, effective December 4, 1953, of the Farmer Cooperative Service (306, no. 1320, supp. 4). The new agency was headed by Joseph G. Knapp, who had been Acting Chief of the Cooperative Research and Service Division when this work was still under Farm Credit Administration (312, no. 989-54).

After 1953, emphasis was on such areas of work as integration, consolidation and mergers, economic research, problems of directors, membership relations, and cooperative information programs with farm youth. Work also included efforts in such areas as public relations, communications, and the teaching of cooperation.

In addition, the various branches of the Service gave increased attention to research studies dealing with implications of new technical developments, problems of reducing operating costs, and ways of achieving greater efficiency in business performance.

Farmer Cooperative Service over the years issued many publications on results of its research studies and on various educational

aspects of its work. Since 1934, it has issued a monthly magazine, *News for Farmer Cooperatives*, to help cooperative leaders and those working with them make farmer businesses more effective.

Directly or indirectly, the Farmer Cooperative Service was in one way or another of assistance to practically all cooperatives in the United States and helped to build a climate favorable to their effective development (11).

Foreign Trade and Public Law 480

During the 1950's, the Department emphasized foreign trade programs and the disposal of agricultural commodities abroad. Congress extended the International Wheat Agreement at regular intervals, authorized the expenditure of mutual security and other foreign program funds for agricultural products, and made certain commodities available for foreign relief donation. All of these programs aided in moving farm products. For example, under the Mutual Security Act of 1953, about \$250 million worth of United States surplus farm commodities moved into export channels.

The Agricultural Trade Development and Assistance Act, better known as Public Law 480, was approved July 10, 1954.²⁷ The idea back of the law was to take advantage of the coincidence of farm surplus in the United States with a great need for food and fiber abroad, to help both other nations and the United States. It proved to be of major importance in disposing of farm products abroad and in aiding the economies of developing countries.

The law authorized the Government to make agreements for the sale of farm products for foreign currency, to make shipments for emergency relief and other aid, and to barter farm products owned by the Commodity Credit Corporation for materials required by our Government. In fiscal years 1954 through 1958, exports under these provisions accounted for 27 percent of total farm exports. In 1959, the law was amended to increase dollar sales of surplus farm goods to friendly nations through long-term agreements and the extension of credit.²⁸ During the 1950's, exports of farm products to nations abroad reached higher levels than ever before in American history.

The Commodity Stabilization Service carried out operations under the International Wheat Agreement and was responsible for barter operations. The Foreign Agricultural Service had the basic responsibility of assisting United States exporters of agricultural products to sell their products abroad, and to administer Title I of Public Law 480, which provided for the sale of surplus commodities for foreign currencies.

The Foreign Agricultural Service was the Nation's primary source of information on foreign agricultural developments, including production, markets, competition, and policy. This information was gathered largely through the efforts of the agricultural attachés. In 1960, the Service had 76 attachés and assistant attachés at 52 foreign cities.

The Foreign Agricultural Service arranged for agricultural representation at an international trade fair in 1955 for the first time. The success of this first effort at Cologne, Germany, led to participation in a number of others.

The Service, generally, represented the Department in international negotiations looking to trade liberalization, and in participation in the affairs of international organizations. The foreign training program, in which agricultural scientists, administrators, and technicians from other countries were given an opportunity to secure training or other aid for coping with problems in their home countries, was carried out under an agreement with the International Cooperation Administration and predecessor agencies with leadership by the Foreign Agricultural Service in cooperation with other departmental and governmental agencies, the land-grant colleges, and private firms.

Efforts To Increase Domestic Consumption

Efforts to increase the consumption of agricultural products within the United States were along previously tried lines. During the early 1950's, many agricultural experts believed that farm production would be used, that surpluses were confined to a few commodities, that the outlet for livestock products could be much expanded, and that in any case population would soon catch up with production capacity. The school lunch program was expanded. A clause of the Agricultural Act of 1954 authorized an expansion in the school milk program. Congress, in an amendment to the Agricultural Trade Development and Assistance Act approved September 21, 1959, authorized the Secretary of Agriculture to carry out a food stamp program in the period February 1, 1960, to January 31, 1962.²⁹ This authority was not exercised by Secretary Benson. There were other areas, particularly in the distribution of food as a relief measure and the further enlargement of the school lunch program, in which Congress and the departmental leadership were in disagreement (295, pp. 31-33; 282, p. 37; 283, 1960, pt. 3, pp. 1269-1288).

The Agricultural Act of 1956 established a bipartisan Commission on the Industrial Use of Agricultural Commodities. In its

final report, the Commission made the following recommendations: (1) Increase participation by public and private institutions in an effective research network; (2) greatly expand basic research on the use of farm products; (3) increase use of grants to increase the Nation's supply of scientists; (4) place more emphasis on Government-industry sharing of research costs; (5) expand research and development work with new crops; (6) make wider use of commercial-scale trials of new products; and (7) offer economic incentives to growers and processors to bridge the gaps between research and established industrial uses of crops (312, no. 1788-57).

A number of research projects carried out by the Department, in some cases in cooperation with State experiment stations or private industry, were devoted to developing new outlets for major commodities. These included work on corn for the fermentation industry, grain for motor fuel, cotton for synthetic fibers, and inedible fats for the feed industry. The development of methods for converting seasonal surpluses of perishable commodities to year-round produce tended to stabilize prices. Work in these areas included frozen orange juice and other frozen juices and juice powders and other dehydrated products.

Marketing research emphasized the efficient distribution of farm products. This included analyzing the cost of marketing and suggesting economies in the distribution system; developing markets through preference determination; studying new products' potentialities; eliminating waste and spoilage in the marketing process; and improving facilities for transporting and distributing agricultural products.

Better Plants and Animals

Other research projects developed new controls for plant and animal pests and diseases, and insured better varieties of plants and livestock, an important aspect of the technological revolution. A center for research of the pink cotton bollworm was opened at Brownsville, Tex., in 1954, and a center for research on foot-and-mouth disease was established at Plum Island, N.Y. A national seed laboratory was established at Fort Collins, Colo., in 1957. A laboratory for wool research was completed in Albany, Calif., in 1960, and a number of laboratories were established for research on soils and water. Other laboratories dealing with particular problems were also established, including new laboratories devoted to basic research.

Basic research may be divided into problem-oriented and un-oriented, or pioneering, research. On May 17, 1957, Byron T.

Shaw, Administrator of the Agricultural Research Service, in a memorandum to Research Division Directors, said pioneering research:

. . . is not aimed at specific practical problems or objectives but rather at the advancement of science. . . . Such research will be undertaken to discover the principles underlying research areas and to develop theory which will greatly facilitate problem research as needs arise. It will be expected to build a foundation for the quick effective and economic solution of research problems.

The first pioneering research laboratory was established at Beltsville on August 21, 1957, with the assignment of investigating the mineral nutrition of plants. Sixteen pioneering research laboratories had been established by 1961.³⁰

Pioneering research was only a small part of research, which included applied research and problem-oriented basic research. Much problem-oriented basic research was undertaken because the principles needed to solve practical problems were not known. At the same time, only through basic research could the Department be prepared to solve the unknown and dimly anticipated problems of the future. During the 1950's, a number of problems were solved by applying the results of basic research. At the same time, knowledge was built up to aid in solving the problems of the future.

The application of knowledge acquired over the years may bring immediate results in a crisis situation. This was true in the conquest of the Mediterranean fruit fly, discovered for the second time in Florida in April 1956. This invader threatened the Nation's citrus fruits and many other fruit and vegetable crops. An earlier invasion, in 1929, had been eradicated in about a year. The new campaign embraced old methods and new weapons. The time-proven methods were surveys, to determine areas infested and extent of infestation; quarantines, to prevent accidental spread; and treatments, to effect eradication. The new weapons included traps, lures, fumigants, and insecticides developed since the 1929 invasion.

A Federal quarantine was invoked on May 16, 1956, and the eradication campaign began. A bait spray was the key to eradication, although many other weapons were used. The bait spray was a mixture of malathion, deadly to the fruit fly but harmless to warmblooded animals at the rates used, and protein hydrolysate, an attractive fruit fly food. This bait spray killed both by contact and as a stomach poison when the flies ate it. This mixture was sprayed over some 210,000 acres of Florida's southeastern coast by aircraft.

Spraying, combined with newly developed lures in new survey traps, permitted the Department to lift the Federal quarantine on May 21, 1957. Surveying continued, and the last fly was found on November 26, 1957. The last spraying was made on February 1, 1958³¹ (9).

An entirely different method was used to attack the screwworm, the maggot of a fly and a true parasite that feeds only on the live flesh of warmblooded animals. The fly lays eggs in a wound, and the maggots which hatch burrow into the flesh of the animal. An infestation can kill an untreated, full-grown animal in 10 days or less. Over the years, farmers and stockmen, particularly in the South, suffered severe losses from the parasite. The only satisfactory treatment lay in treating each wound which might become infested.

In 1937, Edward F. Knipling began to explore the possibility of rearing and releasing screwworm flies in sufficient numbers to exceed the natural population, if some method could be devised to cause the artificially reared flies to destroy the natural population. By 1950, Knipling had hit upon the idea of releasing male flies which had been sterilized by exposure to radiation. Experiments showed that females of the screwworm fly did not discriminate between irradiated sterile males and normal males.

The method was tested on Sanibel and Captiva Islands, off the west coast of Florida, in 1951-53. It was successful. Then it was applied, with the cooperation of the Netherlands Antilles Government, on the island of Curaçao, off the northern coast of South America, again successfully. The next test, in 1957, was in a 2,000-square-mile area near Orlando, Fla.

The Florida livestock industry obtained State appropriations to help establish a screwworm rearing and treatment plant in an airplane hangar at Sebring, Fla. State agencies in Georgia, South Carolina, Alabama, and Mississippi also cooperated in the program to eradicate screwworm flies from the Southeast. As flies were raised and irradiated with radioactive cobalt, they were released by airplane in numbers to overwhelm the native population. By February 19, 1959, the insect was eradicated from the Southeast (129).

In 1960, new research on the screwworm began at Kerrville, Tex., under the direction of Raymond C. Bushland. This was necessary, both to keep the Southeast free of the pest, and to prepare the way for an eradication campaign in the Southwest, announced February 13, 1962 (312, nos. 2139-60, 585-62).

Eradicating the Mediterranean fruit fly and the screwworm were immediate applications of research and eradication techniques developed over a period of time. Such applications were making a major contribution to the revolution in agricultural productivity then underway. Basic research was continuing in many other areas. One such area, the effect of light upon plant growth, dealt with the basis of life itself.

As early as 1918, W. W. Garner and H. A. Allred, specialists in tobacco crops, found that plants differ in the proportions of day and night they need for different growth processes. This concept was called photoperiodism. The discovery aided florists and nurserymen in their crop management.

In 1935, the Department, under authority of the Bankhead-Jones Act, set up a research unit to work entirely on plant growth and light relationships. In 1957, this work was centered in one of the new pioneering research laboratories. Besides Garner and Allred, M. W. Parker, H. A. Borthwick, and Sterling B. Hendricks have been leaders in the work.

Scientists found that plants time growth changes by measuring darkness rather than daylight, and that the red portion of white light is the part vital to plant growth changes. Then, in 1959, the Department of Agriculture announced the discovery of phytochrome, a chemical in growing plants which launches growth changes in response to light. This is a major step forward in explaining precisely how and why plants grow as they do on a sunlit earth (246).

Greater Use of Forest Resources

Changing conditions demand changes in programs. Thus the Forest Service established an Office of Foreign Forestry Service to service the programs of the International Cooperation Administration by technical support for ICA foresters assigned abroad and by the training of foreign nationals.

The Multiple Use Mining Act of July 23, 1955, amended the general mining laws to protect the rights of miners but, at the same time, to permit effective management of the surface resources of mining claims, prior to patent, on the National Forests and other Federal lands.³² By the end of 1960, determination of surface rights under this law was 75 percent complete.

The Forest Service published a complete report on a 3-year on-the-ground survey of the Nation's timber resources in 1958. A significant conclusion of this thorough study was that America's expanding population would require by the year 2000 nearly twice the 1958 production of wood (337, 1958, p. 2).

Research aimed at providing the increased production of wood continued, and, in 1960, several new laboratories were completed. They were located at Missoula, Mont.; Rhinelander, Wis.; Grand Rapids, Minn.; Rapid City, S. Dak.; Lake City, Fla.; Gulfport, Miss.; Delaware, Ohio; and Placerville, Calif. Research saw a major breakthrough in the successful use of antibiotic fungicides in controlling blister rust in western white pine (337, 1960, pp. 7, 10).

The constantly expanding needs for recreational areas for America's growing urban population had been recognized by the Forest Service. In 1956, the Service made a survey of present and future needs and developed a plan for meeting them. Congress made the first appropriation to implement this 5-year plan, called

"Operation Outdoors," for the improvement and establishment of recreational areas in National Forests, in the Appropriation Act for fiscal year 1958.³³ Since then, new facilities have been opened and old ones improved. Recreation was also included in the Multiple Use—Sustained Yield Act of June 12, 1960.³⁴ This important act for the first time gave specific recognition in a single statute to all five of the renewable surface resources of the National Forests—outdoor recreation, range, timber, watershed, and wildlife and fish. The law directed that National Forests be administered for the multiple use and sustained yield of their several products and services.

Conservation of Soil and Water

The Soil Conservation Service continued to work with local soil conservation districts to conserve and improve soil and water resources. By July 1, 1961, soil conservation districts numbered 2,879 and embraced 92 percent of the Nation's agricultural land. The importance of conservation was emphasized by Senator Allen J. Ellender of Louisiana, speaking in 1960:

All through the history of our young Nation, we have been blessed with an almost unlimited supply of land and water. But today, faced with the prospect of an ever-growing population, we must realize that there is a limit to the bountiful gifts that nature has given us. We must look to the future.

The Soil Conservation Service has done a splendid job in this direction. It has convinced thousands of farmers of the benefits of conserving our soil and water resources and has followed through in assisting them in getting on with the job (*271, Apr. 27, 1960*).

The Watershed Protection and Flood Prevention Act of August 4, 1954, authorized the Secretary of Agriculture to assist local organizations in small watershed protection and flood control.³⁵ The act was amended and broadened on August 7, 1956.³⁶ The administration of the act, under the leadership of the Soil Conservation Service, marked a new approach to land and water conservation. The act required local initiation of watershed proposals, State approval, and sponsorship by responsible local organizations recognized by State law. The Federal Government provided technical assistance, loans, and cost sharing for floodwater retarding dams—a new and significant feature supplementing on-farm conservation measures.

These dams were designed to hold back for gradual release up to 5,000 acre-feet of floodwater. In addition, the reservoirs could be designed to store water for municipal, industrial, or recreational uses where local sponsors bore the added costs.

The Great Plains had long presented a challenge to man and his institutions. The great duststorms of the 1930's had drama-

tized the need for special treatment of the arid lands of the West, and several actions had been taken to promote better use of these lands. The Great Plains Agricultural Council had provided continuity for some of these efforts.

In 1954 and 1955, drought and wind erosion again struck part of the Great Plains. Department representatives, working with representatives of the Great Plains States, developed a program to assist farm and ranch operators of the region in the solution of their problems. These activities were reported to the President with a recommendation for additional legislation (317). Congress responded by a law approved August 7, 1956, which authorized the Secretary of Agriculture to enter into contracts, not to exceed 10 years, with farmers and ranchers in the designated area.³⁷ The Secretary assigned leadership of the program to the Soil Conservation Service (306, no. 1408). The program provided technical help in developing a long-range conservation plan and cost sharing on a guaranteed basis, over the period of years of the contract, to help establish practices called for in the plan.

The first contracts were signed in December 1957. By July 1, 1961, nearly 7,000 contracts covered more than 18 million acres in 366 designated counties. One of the major goals and achievements in the program was the return to grass of large acreages of land ill-suited for cultivation.

Loans by Rural Electrification Administration

Atomic energy developments had their impact upon Department programs. Between 1956 and 1958, the Rural Electrification Administration worked with the Rural Cooperative Power Association of Elk River, Minn., and the Atomic Energy Commission in developing plans for the first nuclear powerplant for a rural electric system. The Atomic Energy Commission planned to build and operate the reactor. The conventional part of the plant was owned by the cooperative and financed by a Rural Electrification Administration loan. A contract between the cooperative and the Atomic Energy Commission was approved June 27, 1958. The plant was to go into operation during 1962.

On February 14, 1958, the Secretary proposed legislation to Congress for changing the method of financing the loan programs of the Rural Electrification Administration. A system of private financing would have been built up with Government assistance. The administration also suggested that the interest rate of 2 percent on loans for electric and telephone facilities be increased. Neither proposal was adopted by Congress.

The Rural Electrification Administration celebrated its 25th anniversary in 1960 (350). At that time, 97 percent of the farms in the United States had electric service, 68 percent had telephones. Senator Richard B. Russell of Georgia said with respect to the REA:

I think the creation of the Rural Electrification Administration is one of the most significant things that has happened to the United State since I have been in the Congress, over a period of 28 years (298, 1961, p. 482).

Loans by Farmers Home Administration

In 1953 the personnel of the Farmers Home Administration was sharply reduced in numbers, more emphasis was placed on serving the credit needs of farmers and ranchers during periods when drought and similar disasters brought a temporary need for credit, and less emphasis was given to helping small farmers adjust to changing conditions.

The agency continued to make loans for farm operations, farm purchase or enlargement, and, in most years, for farm housing. In 1954 the water facilities loan program was broadened to include loans for soil conservation.

There was a general tendency throughout these years to restrict the agency's operations. The funds and authority provided by the Congress were in many instances supplied in larger amounts than requested and efforts were made to refrain from utilizing all of the funds and authority provided. Administrative regulations were adopted that prevented many farmers with limited resources from having access to supervised credit. More than \$200 million of appropriated housing loan funds were withheld.

The Watershed Protection and Flood Prevention Act, passed in 1954 and amended in 1956, was a major responsibility of the Soil Conservation Service, as indicated previously. The Secretary of Agriculture assigned the loan responsibility under the act to the Farmers Home Administration.³⁸

The first loan under this program, approved in June 1959, was to help provide supplemental irrigation water for crop and pastureland in Granite County, Mont. The Lower Willow Creek Drainage District borrowed from the Farmers Home Administration to pay its share of the project. The engineering plans and the Federal share of building the dam and the irrigation canal were provided by the Soil Conservation Service. The cost of applying soil and water conservation measures on farmlands of the watershed was borne by the landowners with cost-sharing assistance from the Agricultural Conservation Program Service (312, no. 1519-59).

Rural Development Program

The rural development program was organized to bring the resources of the Department, other Government agencies, State agencies, and private enterprises to bear on areas with low rural incomes. Attempts had been made in earlier years, particularly by the Farm Security Administration, to solve the problem of rural poverty. Some successes had been achieved, but much remained to be done.

The President, in a special message on agriculture on January 11, 1954, asked that particular attention be given to problems peculiar to farmers with low incomes. The first result was a 44-page report entitled *Development of Agriculture's Human Resources*. The general approaches recommended for attacking the problem were to increase productivity in agriculture, improve prospects in part-time farming and nonfarm jobs, increase opportunities for training, and utilize the available resources for defense by bettering the health of the group and by using the labor in decentralized defense industry. These approaches were reinforced by specific recommendations. For example, agricultural services should be provided for part-time farmers, including extension programs, special credit measures, and research.

The responsibility for the rural development program within the Department was assigned to Under Secretary True D. Morse on April 28, 1955 (312, no. 1066-55). The work was largely decentralized, with emphasis upon State and county action in designated pilot counties and areas. The Cooperative Extension Service served as the major leader in program development, with the programs themselves being carried out by a number of agencies. On October 12, 1959, the President established an interdepartmental Committee for Rural Development Program.³⁹

By September 1960, rural development work was planned or underway in 262 counties in 30 States and Puerto Rico. Participating States reported more than 2,000 projects in 1960 to improve farms, build new industries and expand existing ones, help youngsters obtain training, improve health, and accomplish other aims. Yet there was still rural poverty across the Nation, and much remained to be done.

Education Through Extension

The part of the rural development program for which Extension was responsible, though an important operation, was only one aspect of the several programs of the Cooperative Extension Serv-

ice. The overall goal of the Service was to assist farm families in adjusting to the Nation's rapidly changing economy and society.

The unit or whole-farm approach, later called farm and home development, appeared to offer the best opportunity for helping farm families meet changing conditions. This approach provided more intensive counseling for farm families, thus enabling them to deal with their problems as a whole, instead of piecemeal. By 1960, about 144,000 farm families were receiving this type of assistance. Increased Federal and local appropriations in 1954 provided for the employment of about 1,000 new county and home agents to increase efforts through the unit approach.

The 1950's were a decade of adjustment for the Cooperative Extension Service. The need to broaden audiences, to develop farm-town-city interrelationships, and to help farmers adjust to the technological revolution in agriculture brought redirection of programs.

A revised memorandum of understanding relative to the respective responsibilities of the Department and the land-grant colleges and universities was drawn up in 1954 by a joint committee of the Department and the Association of Land-Grant Colleges and Universities. The revised memorandum, which was adopted by the land-grant institutions during 1955, did not change the basic relationship provided in the memorandum of 1914. It provided that the land-grant institutions accept the responsibility for conducting all cooperative extension work and the primarily educational parts of other departmental programs. The Federal Extension Service was recognized as the educational arm of the Department. The memorandum also provided that the Department would conduct all cooperative extension work through the land-grant institutions, except as otherwise mutually agreed.

The Secretary of Agriculture assigned the Federal Extension Service responsibility for coordinating the educational work of the Department. This assignment and the strengthening of the memorandum of understanding were related to an intensive study by the Department and State extension leaders and by county extension agents with local groups of the direction extension work should take.

The study of programs resulted in a report on the scope of extension work published by the Association of Land-Grant Colleges and Universities in April 1958. Nine major areas of program emphasis were listed: Efficiency in agricultural production; efficiency in marketing, distribution, and utilization; conservation, development, and use of natural resources; management on the farm and in the home; family living; youth development; leadership development; community improvement and resource development; and public affairs (71). An extension committee, representing the land-grant institutions and the Federal Extension Service, then examined these areas and developed a guide for carry-

ing out programs centered around the areas recommended for emphasis (72).

One result of the reports was the reorganization of most State extension projects, and a reduction in their number from an average of about 25 to about 8. Marketing was one of the areas which received added emphasis. More specialists in marketing food products were added, and programs of educational marketing assistance for handlers of farm products and for consumers were expanded.

Marketing work in the Extension Service had expanded greatly even earlier in the 1950's, largely as a result of impetus given by the Research and Marketing Act. Work with assemblers, processors, distributors, and consumers increased at a rapid rate. The Federal Extension Service signed a memorandum of agreement in 1955 with the Agricultural Research Service to promote markets for farm products through encouraging new uses for them. Specialists were assigned to work with each of the regional utilization laboratories. By the end of the decade, approximately 350 specialists were employed by the Extension Service to work on marketing.

The Department of Agriculture and the Department of the Interior agreed in 1956 that the Federal Extension Service would be responsible for rendering technical advice and guidance in extension work formerly carried on by the Bureau of Indian Affairs (312, no. 1828-56).

In 1960, the Cooperative Extension Service aided more families than ever before. Extension provided assistance to many nonfarm families in such things as gardening, landscaping, and consumer buying. Enrollment in 4-H Clubs reached a new high, with 55 percent of the young people coming from farm homes, 27 percent from rural nonfarm homes, and 18 percent from urban homes. Work with farm families touched upon virtually every aspect of farm life.

The Technological Revolution in Farming

The programs of the Department—price, surplus disposal, marketing research, production research, regulation, credit, conservation, encouragement of cooperatives, foreign relations, education—were all affected, directly or indirectly, by the increase in productivity which took place during this period.

At the beginning of the period, there were research workers in the Department who were concerned with the potential capacity of agriculture to continue to feed the constantly mounting population.

Most reports resulting from studies of the problem were cautiously optimistic, though, as one analyst put it, "the burden for future food supplies is seen to rest chiefly on increasing the productivity of present land resources" (35, 227, 258).

The need for a cautious view of productivity was quickly dispelled. Supplies increased greatly with little change in land resources used, and even, before long, with some land retired from production. The trend which had begun during World War II continued and accelerated.

By 1957, according to a recent study

. . . inputs in the form of power machinery, mechanical equipment, commercial fertilizer, chemicals for disease and pest control, and prepared livestock feeds, had largely replaced animal power and greatly decreased the relative need for land and human labor.

The change in input mix was due not only to new knowledge and technological change, but also to such closely related forces as changing relative prices, increased specialization, increased size of farm operation, changes in institutional structures of education, credit, transportation, processing and marketing, and the economic activity, development, and progress of the general economy. Even though its contribution to output cannot be isolated, each of these factors is important in explaining the changes in productivity that have occurred (135, p. 1).

No future agricultural policy and no future agricultural program could be effective unless it was related to the revolution in agricultural productivity which had taken place in the 1950's. As Secretary Benson saw it:

Thanks largely to the trail blazing of the free American farmer, it is now possible for men everywhere to live above the level of starvation want. It remains only for us, through our God-given free agency, to use our intelligence and our efforts to lift ourselves into an era of peace and plenty that men of former centuries could only dream about (28, p. 239).

¹ 18 F.R. 3219.

² 18 F.R. 3648.

³ 67 Stat. 390.

⁴ U.S. Department of Agriculture, Commodity Stabilization Service, Notice General 183, Nov. 9, 1953.

⁵ 19 F.R. 74.

⁶ U.S. Department of Agriculture, Production and Marketing Administration, Instruction No. 104-2, Mar. 20, 1953.

⁷ 19 F.R. 3637.

⁸ 68 Stat. 897.

⁹ U.S. Agricultural Research Service, Administrator's Memo. 101.1, Supp. 29, Sept. 14, 1955.

¹⁰ U.S. Agricultural Research Service, Administrator's Memo. 101.1, Feb. 21, 1957.

¹¹ U.S. Department of Agriculture, Production and Marketing Administration, General Notice 165, Sept. 8, 1953.

¹² 18 F.R. 823.

¹³ 18 F.R. 798.

¹⁴ 18 F.R. 1567.

¹⁵ 18 F.R. 2059.

¹⁶ 18 F.R. 1421, 3939.

- ¹⁷ 18 F.R. 3819, 4239.
¹⁸ 18 F.R. 4939.
¹⁹ 18 F.R. 4247.
²⁰ 18 F.R. 3780, 6556.
²¹ 68 Stat. 897.
²² 70 Stat. 188.
²³ 71 Stat. 477.
²⁴ 72 Stat. 988.
²⁵ 72 Stat. 188.
²⁶ U.S. Department of Agriculture, Realized Cost of Agricultural and Related Programs, by Function or Purpose, Fiscal Years 1932-1959, Dec. 1960.
²⁷ 68 Stat. 454.
²⁸ 73 Stat. 606.
²⁹ 73 Stat. 606.
³⁰ T. C. Byerly, Pioneering and Other Basic Farm Research, 13 pp., mimeographed, May 15, 1961.
³¹ U.S. Agricultural Research Service, Cooperative Plant Pest Control Programs, Fiscal Year 1959, pp. 27-28.
³² 69 Stat. 367.
³³ 71 Stat. 257.
³⁴ 74 Stat. 215.
³⁵ 68 Stat. 666.
³⁶ 70 Stat. 1088.
³⁷ 70 Stat. 1115.
³⁸ 21 F.R. 9781.
³⁹ 24 F.R. 8319.

Toward A New Century

The 16th Secretary of Agriculture and the first from Minnesota, Orville L. Freeman, took the oath of office on January 21, 1961. In his first message to employees, Secretary Freeman said:

I have the highest regard for the great traditions of service and of high standards of professional excellence that characterize the Department of Agriculture. The unprecedented progress made by agriculture in the United States is in no small measure due to contributions made by employees of the USDA, in nearly a century of dedicated service.

He pointed out that American agriculture had given the Nation an abundance of food and clothing at a real cost lower than any that had ever prevailed, but that this abundance had created problems. He concluded:

Together, I am confident, we can help to create equality of economic opportunity for the efficient American farmer, we can help to insure enough food and fiber for all Americans, and we can help to direct the use of American agricultural abundance as an instrument for freedom in a hungry world.¹

Secretary Freeman, a lawyer by profession, had served three terms as Governor of Minnesota. A graduate of the University of Minnesota, with bachelor of arts and law degrees, Freeman had spent summers on the family farm homesteaded by his great-grandfather in the 1850's. When appointed in 1961, he was the youngest man ever to occupy the position of Secretary of Agriculture.

Departmental Policy Staff

President John F. Kennedy announced on January 21, 1961, the appointments to six of the top policymaking administrative posts

in the Department. He named Charles S. Murphy, a former Special Counsel to President Harry S. Truman and a former Senate legislative counsel on agriculture, as Under Secretary. Born in North Carolina, Murphy had been practicing law in the District of Columbia and was a resident of Annapolis, Md.

The President named Frank J. Welch, dean of the College of Agriculture at the University of Kentucky, as Assistant Secretary for Federal-States Relations. The new Assistant Secretary for Marketing and Foreign Agriculture was John P. Duncan, Jr., president of the Georgia Farm Bureau. The position of Assistant Secretary for Agricultural Stabilization was filled by James Ralph, Director of the California State Department of Agriculture. Ralph served until February 20, 1962. At that time, John P. Duncan, Jr., became Assistant Secretary for Marketing and Stabilization, and the Foreign Agricultural Service was placed under the supervision of the Under Secretary.

The President appointed Harry Caldwell, master of the North Carolina State Grange, as Chairman of the National Agricultural Advisory Commission. The President also announced that John A. Baker, director of legislative services for the National Farmers Union, would become Director of Agricultural Credit.

The Secretary of Agriculture announced the appointment of Willard W. Cochrane, later to be named Director of Agricultural Economics, as Economic Adviser on January 24, 1961. Born in California, Cochrane was a member of the faculty of the Department of Agricultural Economics in the University of Minnesota (312, no. 206-61).

The appointment of Joseph M. Robertson as Administrative Assistant Secretary of Agriculture was announced by Secretary Freeman on April 13, 1961. Robertson, a native of Kentucky, came to the Department from the Bureau of the Census. He had previously served as commissioner of taxation and as director of tax research in Minnesota (312, no. 1124-61).

Using America's Farm Abundance

President Kennedy's first Executive order directed the Secretary of Agriculture to expand and improve the program of food distribution to needy persons throughout the United States.² Secretary Freeman immediately added canned pork and gravy, dried beans, dried eggs, and, later, rolled oats and peanut butter to the program. Under this new order, the Secretary said, "we are providing essential food for those who need it and at the same time assisting

American farmers by action that will help to decrease our agricultural surplus" (312, no. 197-61).

A pilot food stamp plan, drawing upon the experience of the late 1930's, was the second step taken to make wider use of agricultural products to relieve distress. The program was established on a pilot basis in eight areas of chronic unemployment throughout the country. Commercial food marketing channels were used to increase food consumption among needy families (378). About 140,000 needy persons were participating in the pilot program at the end of 1961.

A six-member committee, headed by Senator Hubert H. Humphrey of Minnesota, reported to President-elect Kennedy on January 19, 1962, in favor of a broader Food for Peace program. The committee said:

It is the aim of the United States to put this agricultural capacity to the fullest use to meet human need, and promote human advancement and development, both at home and abroad (277, Feb. 6, 1961).

Secretary Freeman also saw America's abundance as meaningful in the world situation. He stated on January 26, 1961:

. . . we must expand our programs to utilize our agricultural abundance as an instrument to encourage economic growth in underdeveloped areas of the world, as one of our greatest weapons for peace and freedom, and thus a source of strength for our nation and of security for our people (312, no. 226-61).

President Kennedy also urged greater use of our farm products, both at home and abroad. In a message to Congress on March 16, 1961, he recommended an expansion of the school lunch program and extension and improvement of the special school milk program. He also asked for the authorization of additional funds and for the extension and expansion of the Agricultural Trade Development and Assistance Act of 1954, known as Public Law 480 (283, 1962, pp. 27-28). Generally, Congress adopted the President's recommendations.

A new dimension was envisioned in distribution programs during 1961, when a school lunch program was established in Peru by the Peruvian Government in cooperation with this country's Food-for-Peace program and the Department. The program resulted in noticeable nutritional improvements and led to better school attendance. On February 13, 1962, Secretary Freeman appointed an International School Lunch Program Expansion Study Committee. The efforts of the Committee, headed by Howard P. Davis of the Agricultural Marketing Service, were to be directed toward broadening the scope of the international child feeding programs. One goal was the establishment of international school lunch programs which would meet one-third of a child's daily nutritional requirements (306, no. 1494).

Price Policies and Programs During 1961

In one of his first discussions of agricultural policies and programs, at a Conference on Policies and Programs for American Agriculture, Secretary Freeman said:

. . . we must assure the efficient American family farm the opportunity to achieve parity of income without exploiting either consumers or taxpayers. Government must provide to farmers, as it has provided to other groups in our economy, the tools by which they can achieve equality of economic opportunity. There is no reason why those who produce—and produce efficiently—commodities essential to life, should not receive, for the capital and labor they invest in that production, a return that is comparable to the return received by others for similar investments (*312, no. 226-61*).

Some activities could be undertaken, in part at least, without additional legislation. Others required congressional action. The Secretary had received suggestions for programs at the Conference on Policies and Programs for American Agriculture on January 26, 1961. At this meeting, Herschel D. Newsom of the National Grange, James G. Patton of the National Farmers Union, Charles B. Shuman of the American Farm Bureau Federation, Homer L. Brinkley of the National Council of Farmer Cooperatives, and Murray D. Lincoln of The Cooperative League of the USA outlined their views regarding agricultural needs (*320*).

Some of the recommendations were reflected in President Kennedy's farm message to Congress on March 16, 1961. The President pointed out:

In no other country, and at no other time in the history of our own farm economy have so many people been so well provided with such abundance and variety at such low real cost. . . . In short, our farmers deserve praise, not condemnation; and their efficiency should be a cause for gratitude, not something for which they are penalized.

The President proposed a wider range of tools to boost farm income, expanding the use of the farm abundance, encouragement of cooperatives, aid for low-income farms, liberalization of farm credit and encouragement of electrification programs, more adequate attention to farm resources, and acceleration of soil and water conservation programs.

The first law passed under the new administration respecting agriculture, the Feed Grain Act, was introduced in the Senate on behalf of Senator Allen J. Ellender of Louisiana and in the House by Representative William R. Poage of Texas. The act was approved March 22, 1961. Its purpose was to retire land from the production of corn and grain sorghum by offering conservation payments on land retired, and, at the same time, to make support prices available on corn at a level higher than current market prices. It provided that the 1961 crop of corn should be supported at not less than 65 percent of parity, and established a special conservation program for diverting corn and grain sorghum acreage

to soil-conserving practices. Producers were eligible for price supports only after retiring at least 20 percent of the average acreage devoted to the two crops in 1959 and 1960.³

The Secretary announced on March 23, 1961, that steps had been taken to strengthen the farmer-committee operation of national production adjustment and price support programs. These included: Elimination of county and community election boards and giving agricultural stabilization and conservation county committees authority to conduct elections; making officers of general farm organizations eligible to serve as county committeemen; and giving county committees the authority to assign duties to community committees (312, no. 851-61).

The Agricultural Act of 1961 was approved August 8, 1961. Congress authorized the Secretary to consult with farmers and others in formulating legislative proposals. Specific programs were established for the 1962 crops of wheat and feed grains, aimed at diverting acreage from these crops.

The act authorized marketing orders for peanuts, turkeys, cherries, and cranberries for canning or freezing, and apples produced in specified States. The National Wool Act was extended for 4 years. The basic authority for the sale of surplus agricultural commodities for foreign currency in Public Law 480 was extended through December 31, 1964. The new law extended the date for entering into contracts under the Great Plains program, and extended the special milk program for 5 years.⁴

The Agricultural Act of 1961, along with the Housing Act of 1961, also made sweeping changes in supervised credit programs of the Department, modernizing them and expanding authority to assist nonfarm rural people in improving the neighborhoods in which they lived. The following major changes were made by this legislation: Limits on the amount of individual farm operating loans were raised, and farmownership loans were modified to include financing of a broader range of farms. The insured loan program was improved, and the emergency loan program broadened to include farmers outside designated "emergency areas." Loans for water systems were authorized to associations of nonfarm rural residents. Restrictions on loans to very small and part-time farmers were removed, and the requirement eliminated that small loans for real estate improvements be secured by a mortgage. In addition, authority to make real estate loans solely for refinancing was made permanent. The Department's housing loan program also was broadened to include as eligible nonfarm families living in rural areas.

Rural Areas Development Program

Early in his administration, Secretary Freeman suggested that underemployment in rural America was a serious problem. He

assigned responsibility for the rural areas development program, which had its beginnings in earlier administrations, to the Director of Agricultural Credit. An Office of Rural Areas Development was established June 16, 1961. The new office was to provide leadership and initiative in developing policies and plans for carrying out the program to eliminate low-income underemployment. A Rural Areas Development Board had been established earlier within the Department to advise on the program (306, nos. 1448; 1448, rev.).

After the Secretary of Commerce delegated certain responsibilities under the Area Redevelopment Act of May 1, 1961, to the Secretary of Agriculture, the Secretary of Agriculture redelegated them to Department agencies. The Director of Agricultural Credit and the Office of Rural Areas Development had major responsibilities under the program, as did the Economic Research Service, Federal Extension Service, Farmers Home Administration, Rural Electrification Administration, Statistical Reporting Service, and Soil Conservation Service. Locally, the Cooperative Extension Service had responsibility for organization and educational leadership. The Secretary also appointed an Advisory Committee on Rural Areas Development, made up of representatives of national groups, to advise the Department on legislative proposals and other matters connected with the program (306, nos. 1448, *supp. 1*; 1473).

Reorganization for Policy Implementation

As the Department's first century neared an end, changes in organization were made for the purpose of obtaining the more effective development and implementation of departmental programs aimed at the best utilization of the skills and achievements of the American farmer. These changes were a combination of the revival of former effective units and the establishment of new ones.

On February 24, 1961, Secretary Freeman announced a plan to reorganize research in agricultural economics and statistical reporting under the guidance of a Director, Agricultural Economics, effective April 3, 1961, and named Willard W. Cochrane Director (306, no. 1446). The Director, Agricultural Economics, was administratively at the level of Assistant Secretary, and exercised general direction and supervision of the newly created Economic Research Service and Statistical Reporting Service.

The Economic Research Service brought together the economic research functions carried out by units of the Agricultural Marketing Service, the Agricultural Research Service, and Foreign Agri-

cultural Service. The Statistical Reporting Service was responsible for statistical functions formerly carried out by several units of the Agricultural Marketing Service.

The organization included a Staff Economists Group under the immediate supervision of the Director, Agricultural Economics. A Management Operations Staff, headed by an Executive Director, was to provide management services to both the Economic Research Service and the Statistical Reporting Service (53).

The Secretary of Agriculture said in discussing the new agencies :

They will put renewed vigor into providing better information to U.S. farmers, ranchers and consumers, and to foreign countries on agricultural needs both in the United States and abroad (312, no. 1019-61).

The memorandum announcing the plan to consolidate the economic and statistical work also carried plans for the transfer of other functions between agencies. These plans, for the most part, became effective April 24, 1961 (306, no. 1466, *supp.* 2).

The functions of the General Sales Manager and the Barter and Stockpiling Division of the Commodity Stabilization Service were transferred to the Foreign Agricultural Service. This was to permit better coordination with other efforts that were being made to increase the exports of agricultural commodities.

The administration of milk and tobacco marketing agreements was transferred from the Agricultural Marketing Service to the Commodity Stabilization Service. The Agricultural Conservation Program Service was transferred from the direction of the Assistant Secretary, Federal-States Relations, to the Assistant Secretary, Agricultural Stabilization, for assignment to the Commodity Stabilization Service. This transfer led to a major reorganization within the Commodity Stabilization Service, which became the Agricultural Stabilization and Conservation Service, effective June 5, 1961. The new organization had five Deputy Administrators, each assigned to one of the following specific areas: State and county operations, conservation, price and production, commodity operations, and management.⁵

The Secretary announced on July 19, 1961, the establishment of the Cooperative State Experiment Station Service, effective September 1, 1961. The original Hatch Act of 1887 and its amendments had provided for the support by the Federal Government of a comprehensive program of research in agriculture carried on by the States through their State agricultural experiment stations. The act directed the Secretary to furnish advice and assistance in carrying out the research programs. The establishment of the new service had been strongly recommended by the land-grant colleges and universities of which the agricultural experiment stations are a part (306, no. 1462).

The Secretary emphasized that the responsibility for coordinating research by all agencies of the Department and by the State agricultural experiment stations under Federal-grant funds was

assigned to the Administrator, Agricultural Research Service. This meant that the new Service and the Agricultural Research Service would maintain a close relationship in carrying out their respective jobs (306, no. 1462, *supp. 1*).

On August 21, 1961, the Secretary said that the Department would seek to strengthen the sound growth of farm cooperatives, not only in the interest of the cooperatives themselves and their members, but also for the significant and essential role they could play in the development of a national farm program. He reaffirmed the Department's statement of policy issued March 24, 1952, regarding the importance of cooperatives, and stated that the Department would work to help them meet the challenge of expanding horizons (312, no. 2655-61).

Proposed Programs

In March 1962, the Department proposed what was called a program for the 1960's, the ABCD program, based upon abundance, balance, conservation, and development. The program was based upon abundance since the technological revolution was resulting in a steadily expanding output. A balance was needed to permit a flexible, efficient agriculture to produce abundantly and earn a fair return. The need for conservation and efficient resource use, particularly in developing recreation and wildlife, was stressed. Finally, there was need for the development of better economic opportunities for people who lived in rural areas.

Conservation

The statement on the proposed program for the 1960's began:

Our greatest natural resource is the land, the hundreds of millions of acres—three-fourths of them privately owned—on which we find our fields and our forests, our pastures and our parks. Our program for the sixties seeks to encourage the use of the land in ways that best meet the needs of all of our people today, and that will conserve the wealth that lies in this irreplaceable resource to meet the needs of tomorrow (318, p. 1).

Work on the orderly development and use of the Nation's land and water resources in balance with national and regional needs had received emphasis during 1961, when Secretary Freeman established a Land and Water Policy Committee. This Committee, with George A. Selke of the Office of the Secretary as Chairman and Harry Steele of the Economic Research Service as Cochairman,

was to review the present and prospective land, forest, and water resource situation, analyze its implications for Department policies, and make program recommendations (306, no. 1464).

Locally organized and directed soil conservation districts offered a method whereby the Department of Agriculture had aided private citizens who owned and operated the land in carrying out water and soil conservation. The Secretary, on February 1, 1962, directed the departmental agencies with conservation responsibilities, including the Soil Conservation Service, the Forest Service, the Farmers Home Administration, the Agricultural Research Service, the Economic Research Service, the Cooperative State Experiment Station Service, the Federal Extension Service, the Agricultural Stabilization and Conservation Service, and the Office of Rural Areas Development, to work with the soil conservation districts in a way to insure a reflection of broadened concepts of soil and water conservation. The Secretary's directive explained the broadened concept of soil and water conservation, and invited individual soil conservation districts to revise their basic memorandums of understanding with the Department of Agriculture in light of this modern concept (306, no. 1488).

On September 21, 1961, the President sent to the Congress a report prepared by the Forest Service entitled "A Development Program for the National Forests." This program, building upon the 1959 National Forest program discussed in the preceding chapter, called for: (1) Substantially broadened and intensified recreation resource management; (2) acceleration of timber harvesting and management; (3) adjustment of the road and trail program to provide needed multiple-purpose roads; and (4) acquisition of needed tracts within National Forest boundaries, especially those having recreational values (312, no. 3090-61).

Administrative Improvement Programs

Secretary Freeman initiated a study on August 1, 1961, in an effort to reverse the rising trend of administrative costs in terms of dollars and employees. An automatic data processing study group, under the direction of Joseph M. Robertson, began work on the problem. The group was made up entirely of Department employees, with John C. Cooper, Jr., of the Office of Budget and Finance and Charles C. Weaver of the Agricultural Stabilization and Conservation Service serving as project leaders, and Carl B. Barnes, Director of Personnel, as adviser.

The group devised a new program, using existing equipment, which would be put in operation in two steps. The first combined

payroll, personnel recordkeeping, and related budget and accounting work into an automatic data processing system to take advantage of the high-speed calculating ability of electronic computers. This part of the system was to be put in operation early in 1963. The second part, to be put in operation by 1964, would apply the information gathered from payroll, personnel, and related budget and accounting operations to new management techniques. Particularly, it would provide month-by-month evaluation of the effectiveness of the Department's programs (312, no. 4008-61).

The successful development of plans for greater automation in management was reflected in reassignments of management duties. The Secretary of Agriculture wrote on December 8, 1961:

Staff offices and agencies alike should critically analyze and review all management and program policies and practices on a continuing basis to achieve optimum operating effectiveness and economies. By working together, the staff offices and the agencies can carry out our agricultural programs in the manner which the farmer, the public, and the Congress expect.

As an initial step to achieve these objectives, the Office of Management Appraisal and Systems Development was established under the general direction and supervision of the Administrative Assistant Secretary. This office was to work on management appraisals, systems design, automatic data processing, operations research, and related management techniques in cooperation with the operating agencies of the Department. At the same time, the Office of Administrative Management was abolished and its responsibilities were assigned to other staff offices (306, no. 1477).

New Personnel Programs

Carl B. Barnes, immediately upon his appointment as Director of Personnel on July 10, 1961, secured the support of Assistant Secretary for Administration Joseph M. Robertson for a department-wide conference on personnel policy. The purpose of this conference was to explore needs for policy and program changes for the more effective management of personnel in the Department. Planning this conference was assigned to C. O. Henderson, who had served as general manager of similar conferences held during the 1940's. The results of a survey of employee reaction to personnel policies and problems proposed for study by agency management officials were the basis of the selection of eight major problem areas for study at this conference held September 25-29, 1961.

The Department's Office of Personnel also took the lead within the Federal Government in two major personnel areas, both of

which were considered by the Personnel Policy Review conference. These were utilization of new techniques, particularly automatic data processing, in personnel management; and the development of a program of working relationships with employee unions. The utilization of data processing was closely related to the work of the Office of Management Appraisal and Systems Development.

The recommendations on employee-management relations made by the Personnel Policy Review conference were sent to the President's Task Force on Employee-Management Relations in the Federal Service in early October. On January 18, 1962, the day after the President's Executive Order 10988 on employee-management relations was released, Secretary Freeman issued a statement of policy in which he said :

It is our firm intention and policy to cooperate with the representatives of employee organizations with the goal in mind of making the Department a model employer and providing the conditions under which each employee will strive to be a conscientious and efficient public servant (306, no. 1486).

On March 8, 1962, the Department announced that it had accorded exclusive recognition to the National Joint Council of Meat Inspection Lodges of the American Federation of Government Employees, AFL-CIO, for all the Department's meat inspectors, with the exception of veterinarians and supervisors. This was the first exclusive recognition of an employee union accorded by any agency of the Federal Government under the terms of the new Executive order. The union was to represent employees on grievances, safety, tours of duty, vacation schedules, and other matters not fixed by law and regulation. As a condition for the agreement, the union agreed not to assert the right to strike and not to discriminate in its activities on the basis of race, color, or religion (312, no. 874-62).

Consolidated Field Offices

The Secretary, on February 2, 1962, directed all agencies to carry out the policy of housing together, in consolidated offices, field activities which served the same geographical areas, such as county, State, or region, a revival of a policy initiated by Secretary Brannan in 1951. Secretary Freeman stated that the policy was to

. . . insure maximum service and convenience to the public, to facilitate coordination and interagency understanding of interrelated Department programs, and to promote efficiencies and economies in the handling of administrative functions common to all agencies (306, no. 1492).

The National Agricultural Library

In the 100 years after 1862, the library collection of the Department grew from 1,000 volumes to over 1 million. On September 18, 1961, its Director, Foster E. Mohrhardt, reorganized it into four functional areas—Technical Services, Public Services, Field and Special Services, and Management Services, each headed by an Assistant Director. The library was, in 1962, next to the Library of Congress, the largest Government library in existence.

The information contained in the collection was disseminated through the *Bibliography of Agriculture*, special bibliographies and indexes, and references and lending services to research scientists, the general public, and others in the United States and every part of the world. In recognition of the national character of this institution, Secretary Freeman, on March 23, 1962, designated it the National Agricultural Library (306, no. 1496).

Toward the New Century

For 100 years, the United States Department of Agriculture has worked with the American farmer to insure the American consumer freedom from hunger and a constantly improved diet at a modest price. The result has been one of the world's greatest success stories—the conquest of the fear of famine and a production so abundant as to be beyond the dreams of men 100 years ago.

The Department has represented the public interest in agriculture, including both the farmer and the city worker. Today, because of the work of the Department of Agriculture, America's food supply is not only ample; it is nutritious and safe. As Representative Jamie L. Whitten of Mississippi has said:

It takes so few of us to provide food, clothing, and shelter for the rest of us that the rest of us can provide the best national defense and the highest standard of living for all of us that any nation has ever seen (283, 1963, p. 3).

Agriculture's role in America's economic growth has been a vital and continuous one. To meet basic food and fiber needs of a growing population and an increasingly industrialized economy was agriculture's fundamental contribution, but this has had many aspects. A departmental study group under the chairmanship of James P. Cavin, Economic Research Service, has analyzed these as: (1) Transfer of surplus labor to meet expanding needs for industrial manpower; (2) formation of new capital required by both industry and agriculture; (3) increased purchases from abroad through the expansion of agricultural exports; (4) creation of new

demands for nonfarm products; (5) increase in national output, income, and levels of living; (6) creation of a productive capacity capable of meeting emergencies in war and peace; and (7) the direct use of agricultural commodities in fostering economic development throughout the world.

These achievements have not happened either by chance or through a few isolated advances in agricultural production and marketing. Rather, they have developed over a hundred years. In 1862, American farmers were making the change from manpower to animal power and its accompanying mechanization. By 1962, American farmers had completed the transition from animal power to mechanical power and its accompanying technology. The intervening period saw the bringing together of many forces, culminating in a technological revolution.

The American farmer himself is a major part of the answer to the question of how this change came about. Rugged, individualistic yet cooperative, and willing to learn and to experiment, the American farmer is the greatest production expert the world has yet seen.

The State agricultural colleges and universities, established in every State by the Morrill Land-Grant College Act of 1862, and their allied State experiment stations and extension services have added the localized research and education that have helped the American farmer adapt scientific advances to his own circumstances.

The farm papers, beginning in 1810, and the national farm organizations, the first of which was founded in 1867, brought knowledge to the farmer and gave him a means of achieving some of his goals. The implement manufacturers, the fertilizer producers, the chemical industry, and others helped the farmer achieve increased production, while the processors of food and fiber helped him market his products. In many cases, farmers joined together in cooperatives to achieve their aims.

The Department of Agriculture, working primarily with the farmer and representing the public interest in agriculture, complemented the other institutions, groups, and individuals, and made basic contributions of its own to the farmers' success. Not the least of these contributions was in affording the individual family farmer an opportunity to express himself in our emerging society of a century ago, and in establishing a responsible service relationship between the Department and the family farmer.

In economic terms, as Jesse W. Tapp has said :

. . . the most significant inputs that were made in American agriculture, I believe, are those spent in the establishment of the U.S. Department of Agriculture and the land-grant college system, and their subsequent programs of research and education. In few, if any, other ventures has the marginal productivity of capital been so great.

The products have been of several types. First, the new discoveries—new, improved varieties; hybrid seeds; balanced fertilizers; new machines; chemicals for disease, weed and insect control; and

growth hormones—have combined to supply our nation with the greatest abundance and variety of wholesome food that any nation has ever experienced. Second, the educational programs have equipped many of our outstanding farm youth with professional skills with which they have made outstanding contributions to society, both rural and urban (218, p. 54).

These returns from the Department, as Tapp suggests, have taken many forms in addition to the primary one of aiding American farmers to supply needed food and fiber at moderate cost. The Department, for example, by meat inspection, by the work which led to the passage of the Pure Food and Drugs Act, and by grading and other regulatory work, has made it possible to buy food with confidence.

Good food, in adequate supply, has helped keep Americans healthy, but the Department has done even more for health. The departmental research workers who discovered that disease could be transmitted by insects inspired the investigations which led to the discovery of the part insects have in causing malaria, yellow fever, Rocky Mountain spotted fever, and other scourges. The discovery that certain types of mosquitoes carried malaria and yellow fever led to research by Department entomologists to control mosquitoes. This work virtually erased malaria and yellow fever in the United States, and made possible the more productive use of many formerly mosquito-ridden areas.

Department scientists discovered an effective, low-cost method of producing penicillin. Rutin, an aid to persons with fragile capillaries, was discovered in a Department laboratory. Other lifegiving and lifesaving discoveries have come from the Department of Agriculture.

Nutritional research, carried on almost from the Department's establishment, has given Americans the knowledge necessary to make the best use of the Nation's farm abundance. Some of the basic research on vitamins has been developed from this work on nutrition. Marketing research, too, has helped bring a supply of healthful, attractive food to the American table.

The supply of food and fiber has increased almost beyond belief, in large part as a result of research in better crops and livestock, fertilizers, farm machinery, pesticides, and the other things needed for production. Economic research has shown the farmers how best to combine all of these things, and how to meet some of their economic problems. Statistical work has helped farmers decide what crops to plant each year and when to market their crops. Research and service to farmer cooperatives have helped farmers solve some of their marketing, farm supply, and business service problems. The work on foreign agriculture and markets, which has been carried on to some extent since the Department was established, has helped the farmers find markets, which in turn have provided much of the foreign exchange necessary for the Nation's development. Regulatory and service activities in marketing, based upon research, have aided farmers in the complex task of

moving their products to market, in addition to helping insure a steady flow of food and fiber to consumers. Price and adjustment programs have helped stabilize farm incomes and production.

Research has been basic to the Department's contribution to the Nation. Education has brought the results of research to the farmer. The Department, with the allied Cooperative Extension Service, has become one of the world's great educational institutions. During the past 100 years, it has developed, through information activities carried on throughout the Department, the work of county and home demonstration agents, and activities of farmers' committees, a democratic and effective system for getting knowledge to the farmers.

Conservation, too, has been of broad benefit to the American people. The forests, soils, and waters, protected by the programs of the Department of Agriculture, are vital to all.

Agriculture's credit programs have helped make many farmers a definite part of the Nation's economy by aiding them to move from a less than self-sufficient existence into the productive, family farmer class. Electricity and telephones have brought cities and farms closer together.

Truly, the people of the United States have reason to be proud of one of the Nation's great institutions dedicated to the welfare of the American individual—the United States Department of Agriculture. Yet, while its history is cause for pride, there are still problem areas with which the Department is vitally concerned. The major problems are: (1) Underconsumption; (2) overproduction; (3) conservation and resource use; and (4) greater opportunities in nonfarm occupations for farm and rural people uprooted by the technological revolution in agriculture.

The Department of Agriculture and the individuals who make it up have, for the past 100 years, through dedicated service, helped the farmers and the Nation achieve freedom from hunger and the threat of famine, and free American resources for the industrial development of the United States. During the next 100 years, the American people can look forward to the effective use of the Nation's agricultural resources. Whatever the problems are or may be, the efforts of the men and women of the United States Department of Agriculture will be at the service of the American people.

¹ U.S. Department of Agriculture, Memorandum to all Employees, Jan. 23, 1961, History Branch Files, USDA.

² 26 F.R. 639. ³ 75 Stat. 6. ⁴ 75 Stat. 294.

⁵ U.S. Agricultural Stabilization and Conservation Service, Notice General 668, June 6, 1961.



American agricultural abundance is an instrument for freedom in a hungry world.

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Appendix*

Biographies of Commissioners, Secretaries, Under Secretaries, and Assistant Secretaries of Agriculture, 1862-1961

Anderson, Clinton Presba. Born on October 23, 1895, in Centerville, Turner County, S. Dak. He received his education at Dakota Wesleyan University and the University of Michigan, and later moved to New Mexico. He was an insurance executive, newspaperman and editor, and operated two farms. He was a president of Rotary International. He served as a member of the House of Representatives from January 3, 1941, to June 30, 1945. Anderson was Secretary of Agriculture from June 30, 1945, to May 10, 1948. He has served as Senator from New Mexico since January 3, 1949.

Aplin, Richard David. Born in Putney, Vt., on September 18, 1903. He received the degrees of bachelor of arts and master of arts in animal husbandry and agricultural economics from the University of Vermont. He has been a farmer, county agent, extension economist, and government employee. In 1953 he became Director of Departmental Administration. From July 13 to August 31, 1953, Aplin served as Administrative Assistant Secretary of Agriculture. Before and after his 1953 governmental service in Washington, he was Administrator of the Boston Federal Milk Marketing Order.

Appleby, Paul Henson. Born near Ash Grove, Greene County, Mo., on September 13, 1891. He graduated from Grinnell College, and was an editor and publisher in Iowa, Minnesota, Montana, and Virginia. He was Assistant to the Secretary of Agriculture from 1933 to 1940. Appleby served as Under Secretary of Agriculture from September 5, 1940, to January 31, 1944. Later he was Assistant Director of the Bureau of the Budget, dean of the Maxwell Graduate School of Citizenship and Public Affairs at Syracuse University, and budget director for the State of New York.

Baker, John Austin. Born February 22, 1914, in Paris, Logan County, Ark. He graduated from the College of Agriculture, University of Arkansas, re-

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ceived the degree of master of science from the University of Wisconsin in agricultural economics and took additional graduate work at the University of Wisconsin, Harvard University, and Princeton University. He was employed in the Bureau of Agricultural Economics, the Production and Marketing Administration, the Farm Security Administration, and as Assistant to the Secretary of Agriculture. He then served as director of legislative services, National Farmers Union. He was appointed as Director, Agricultural Credit, on February 25, 1961. On July 10, 1962, this position was abolished and Baker redesignated "Director of Rural Development and Conservation." On August 3, 1962, he was appointed Assistant Secretary and was assigned responsibility for Rural Development and Conservation.

Ball, Elmer Darwin. Born in Athens, Vt., on September 21, 1870. He received degrees of bachelor of science and master of science from Iowa State College, and his doctorate from Ohio State University. He taught zoology and entomology at Iowa State College, Colorado Agricultural College, and Utah Agricultural College. He was dean of the School of Agriculture and director of the Utah State Experiment Station. Later he served as State entomologist in Wisconsin and in Iowa, and as vice president of Utah Agricultural College. Ball was Assistant Secretary of Agriculture from June 12, 1920, to September 30, 1921. Afterwards, he was Director of Scientific Work in the Department, an entomologist in Florida, and dean of agriculture at the University of Arizona. He died on October 5, 1943.

Benson, Ezra Taft. Born August 4, 1899, at Whitney, Franklin County, Idaho. He attended Utah State Agricultural College and graduated from Brigham Young University. He received the degree of master of science in agricultural economics from Iowa State College and took additional graduate work at the University of California. He was a farmer, teacher, missionary, agricultural extension worker in Idaho, serving as director of the Farm Foundation, and active in cooperative organizations, executive secretary of the National Council of Farmer Cooperatives. He was a member of the Council of Twelve of the Church of Jesus Christ of Latter-day Saints at the time he was appointed Secretary of Agriculture. He was Secretary from January 21, 1953, to January 20, 1961.

Brannan, Charles Franklin. Born in Denver, Colo., on August 23, 1903. He attended Regis College and graduated from the University of Denver Law School. He was a lawyer and the part owner of a ranch in Colorado. In 1935 Brannan joined the Resettlement Administration as an attorney and later served in the Farm Security Administration. On June 21, 1944, he became Assistant Secretary of Agriculture. Brannan became Secretary of Agriculture on June 2, 1948, and remained until January 20, 1953. Since 1953, he has been engaged in private law practice and has served as general counsel for the National Farmers Union.

Brigham, Joseph Henry. Born in Lode, Medina County, Ohio, on December 12, 1838. He attended Berea University and the Normal School at Lebanon, Ohio. He combined farming with various county and State offices in Ohio, including service in the State Senate. For 9 years he was master of the National Grange and promoted the establishment of the Ohio State Experiment Station. Brigham became Assistant Secretary of Agriculture on March 23, 1897. He died in office on June 29, 1904.

Brown, Harry Lawrence. Born in Georgia on September 23, 1888. He attended Georgia schools, graduating from the College of Agriculture of the University of Georgia. He was a county extension agent and became director of extension work in Georgia. Brown served as Assistant Secretary of Agriculture from January 2, 1937, to December 5, 1939. Later he worked for the Tennessee Valley Authority, the Farm Credit Administration, and the University System of Georgia. He also served as a member of the Georgia State Senate.

Butz, Earl Lauer. Born on July 3, 1909, near Albion, Ind. He received degrees of bachelor of science and doctor of philosophy from Purdue University, and also attended the University of Chicago. He operated the family

farm for about a year after graduation. For a number of years he taught at Purdue University and served as head of the agricultural economics department. Butz was Assistant Secretary of Agriculture for Marketing and Foreign Agriculture from August 2, 1954, to July 31, 1957. Then he became dean of the School of Agriculture, director of extension work, and director of the experiment station at Purdue University.

Capron, Horace. Born in Attleboro, Mass., on August 3, 1804, and grew up in the State of New York. He was a farmer and manufacturer in Maryland. Later, as a resident of Illinois, he was a cattle breeder. On December 4, 1867, Capron became Commissioner of Agriculture. He resigned, effective July 31, 1871, to head an agricultural advisory commission for the Japanese Government. He died on February 22, 1885.

Christie, George Irving. Born in Winchester, Ontario, Canada, on June 22, 1881. He received degrees of bachelor of science in animal husbandry from Ontario Agricultural College and bachelor of science in agronomy from Iowa State College. He taught agronomy at Iowa State College and Purdue University, where he also served as director of extension work. He was appointed State food director in Indiana in 1917. Christie served as Assistant Secretary of Agriculture from October 14, 1918, to June 30, 1919. He returned to the position of director of agricultural extension at Purdue University and later became president of Ontario Agricultural College. He died on August 3, 1953.

Cochrane, Willard Wesley. Born in Fresno, Calif., May 15, 1914. He received degrees of bachelor of science from the University of California, master of science from Montana State College, and doctor of philosophy from Harvard University. He taught at the University of Minnesota, University of Chicago, and Pennsylvania State University. He was employed in the Bureau of Agricultural Economics and the Farm Credit Administration of the Department of Agriculture, the War Food Administration, Office of Price Administration, and the Food and Agriculture Organization of the United Nations. He was appointed Director, Agricultural Economics, when the position was established April 3, 1961.

Coke, James Earl. Born near Downey, Calif., on May 28, 1900. He studied at Pomona College and received the degree of bachelor of science in agriculture from the University of California. He was a county agent-agronomy specialist, and later Director of the Agricultural Extension Service in California. Coke had also been an agricultural business executive. He became Assistant Secretary of Agriculture on January 21, 1953, and after November 2, 1953, he was in charge of Federal-States Relations. He left the Department on November 14, 1954, to return to his former position of director of agricultural extension work in California. Later he became vice president of the Bank of America.

Colman, Norman Jay. Born near Richfield Springs, N.Y., on May 16, 1827. He received a law degree from the University of Louisville and moved to Indiana to practice. Later he was elected to the Missouri State Legislature and became Lieutenant Governor of the State. In 1865 he founded *Colman's Rural World*. He was active in State, regional, and national agricultural organizations. He became Commissioner of Agriculture on April 3, 1885, and served as the first Secretary of the Department of Agriculture from February 15, 1889, to March 6, 1889. Colman died November 3, 1911.

Dabney, Charles William, Jr. Born at Hampden-Sidney, Va., on June 19, 1855. He graduated from Hampden-Sidney College and the University of Virginia, and received the degree of doctor of philosophy from the University of Göttingen. He also attended the University of Berlin. He taught at Emory and Henry College and had been professor of chemistry at the University of North Carolina, served as State chemist for North Carolina, and was director of the agricultural experiment stations in North Carolina and Tennessee. Dabney was professor of agriculture at the University of Tennessee and became president of the university. He served as the second Assistant Secre-

tary of Agriculture from January 1, 1894, to March 22, 1897. Later he was president of the University of Cincinnati. He died on June 15, 1945.

Davis, Chester Charles. Born November 7, 1887, near Linden, Dallas County, Iowa. He received the degree of bachelor of arts from Grinnell College, Iowa. He then became a newspaperman and later editor of the *Montana Farmer*. He was commissioner of agriculture and labor in Montana. He began his service in the Federal Department of Agriculture in the Agricultural Adjustment Administration, of which he later was Administrator. He was appointed to the Board of Governors of the Federal Reserve System and President of the Federal Reserve Bank of St. Louis. While on leave from these two positions he served as chairman of the Agricultural Division of the National Defense Advisory Commission and as War Food Administrator. His appointment to the latter position, at first called Administrator of Food Production and Distribution, was announced March 25, 1943; he resigned as War Food Administrator June 28, 1943. Later he became associate director of the Ford Foundation and a regents professor of agricultural economics at the University of California at Berkeley.

Davis, John Herbert. Born on October 9, 1904, near Wellsville, Mo. He received the degree of bachelor of science from Iowa State College, and master of arts in agricultural economics and doctor of philosophy at the University of Minnesota. He was a teacher, school superintendent, and career employee of the United States Department of Agriculture. Later he was executive secretary of the National Council of Farmer Cooperatives and general manager of the National Wool Marketing Corporation. Davis returned to the Department in 1953 as Director of Commodity Marketing and Adjustment. He became an Assistant Secretary of Agriculture on July 21, 1953, and remained until July 31, 1954. In 1954, he became director of the program in agriculture and business at Harvard University, and has served as director of the United Nations Relief and Works Agency since 1959.

Dodd, Norris Edward. Born in Iowa on July 20, 1879. He lived in North Dakota, South Dakota, and then in Oregon. After some years as a pharmacist, he returned to farming. He served in the Department of Agriculture, becoming Chief of the Agricultural Adjustment Agency in 1943. From April 8, 1946, to June 7, 1948, Dodd was Under Secretary of Agriculture. Then he became Director General of the Food and Agriculture Organization, a position he was to hold until 1953.

Duncan, John Paul, Jr. Born near Quitman, Ga., on December 17, 1917. He graduated from Emory University, majoring in economics, and took graduate work at the University of Georgia. He worked at the county level and in Washington in the Agricultural Adjustment Administration, returning to Brooke County, Ga., to operate a farm in partnership with his father. He has been an agricultural leader and was elected president of the Georgia Farm Bureau Federation. Duncan was Assistant Secretary of Agriculture for Marketing and Foreign Agriculture from February 27, 1961, until February 20, 1962, when he became Assistant Secretary for Marketing and Stabilization.

Dunlap, Renick William. Born in Kingston, Ohio, on October 21, 1872. He received the degree of bachelor of science from Ohio State University. He then operated a farm and became an agricultural organization leader. After participating in Ohio politics, he became secretary of the State board of agriculture. Dunlap served as Assistant Secretary of Agriculture from April 1, 1925, to March 6, 1933. He died on March 2, 1945.

Farrington, Robert L. Born near Decatur, Tex., October 14, 1895. He received the degree of bachelor of laws from National University, bachelor of science from American University, and doctor of juristic science from the Catholic University of America, all in Washington, D.C. He worked in banks and practiced law in Oklahoma. He entered the Federal service in the Federal Farm Board, continuing in the Farm Credit Administration and as Associate Solicitor of the Department of Agriculture. He was Director, Agricultural Credit, from October 25, 1953, to March 15, 1954, having previously served

as Acting Director from March 10, 1953. He was then appointed Solicitor and later General Counsel of the Department. In 1959, he was appointed as general manager of the National Wool Marketing Corporation.

Ferguson, Clarence Meadd. Born in Canada, on a farm in Parkhill, Ontario, on June 21, 1899. He graduated from Ontario Agricultural College and attended Michigan State College and Ohio State University. He taught at Michigan State University and was an extension poultry specialist there and at Ohio State University. Later Ferguson became director of the Ohio Agricultural Extension Service and Administrator of the Federal Extension Service. From September 17, 1960, to January 20, 1961, he was Assistant Secretary of Agriculture for Federal-States Relations. From Washington, he went to the National Agricultural Extension Center for Advanced Study, University of Wisconsin.

Freeman, Orville Lothrop. Born in Minneapolis, Minn., on May 9, 1918. He attended Minnesota schools and graduated from the University of Minnesota, where he also received his law degree. After World War II he practiced law and participated in Minneapolis municipal affairs. He was elected Governor of Minnesota in 1954 and served three terms. Freeman became Secretary of Agriculture on January 21, 1961.

Galloway, Beverly Thomas. Born in Millersburg, Mo., on October 16, 1863. He graduated from the University of Missouri, where he later taught. For more than a quarter of a century, he was Chief, first of the Division of Plant Physiology and Pathology, and then, of the Bureau of Plant Industry. Galloway was Assistant Secretary of Agriculture from March 17, 1913, to July 31, 1914. He was later dean of agriculture at Cornell University and a pathologist and collaborator in the U.S. Department of Agriculture. He died on June 13, 1938.

Gore, Howard Mason. Born October 12, 1877, in Clarksburg, W. Va. He received the degree of bachelor of arts in agriculture from the University of West Virginia. He directed the operation of several farms in West Virginia and became known as a breeder of fine cattle and hogs. He worked in the Bureau of Animal Industry and the Packers and Stockyards Administration. He was appointed as Assistant Secretary of Agriculture on September 17, 1923. He became Acting Secretary when Henry C. Wallace died, October 25, 1924. Gore was designated as Secretary of Agriculture on November 22, 1924, remaining in the position until March 4, 1925, when he became Governor of West Virginia. Later he was Commissioner of Agriculture for West Virginia and was director of several banks in the State. He returned to the Federal service and worked in the Farm Security Administration. He died on June 20, 1947.

Hays, Willet Martin. Born in Hardin, Iowa, on October 19, 1859. He attended Oskaloosa College, Drake University, and Iowa State College. From the latter he received degrees of bachelor of science and master of science in agriculture. He taught at Iowa State College, the University of Minnesota, and North Dakota Agricultural College. For some time, he was editor of the *Prairie Farmer*. Hays was Assistant Secretary of Agriculture from December 21, 1904, until March 7, 1913. He then described himself as a consulting agriculturist in Washington. Later he was an agricultural adviser in Argentina. He died on January 15, 1928.

Hill, Grover Bennett. Born in Gainesville, Tex., on April 3, 1889. He attended the University of Texas and was a rancher, raising cattle, wheat, and grain sorghum. After serving in the Agricultural Adjustment Administration, he was appointed as Assistant Secretary of Agriculture on December 21, 1939, and Under Secretary of Agriculture on February 26, 1944. He remained in this position until June 29, 1945. He became president of the Federal Intermediate Credit Bank at Wichita, Kans. Hill died October 12, 1961.

Houston, David Franklin. Born in Monroe, Union County, N.C., on February 17, 1866. He received the degree of bachelor of arts from the College of South Carolina and remained for a year of graduate study. He continued his

graduate study at Harvard University and received the degree of master of arts in political science. He taught political science at the University of Texas and became dean of the faculty. He was president of the Agricultural and Mechanical College of Texas and the University of Texas, and chancellor of Washington University at St. Louis. Houston served as Secretary of Agriculture from March 6, 1913, to February 2, 1920, when he became Secretary of the Treasury. Later he was president of Bell Telephone Securities Co. and a vice president of American Telephone & Telegraph Co. For a number of years he was president of Mutual Life Insurance Co. of New York. He died on September 2, 1940.

Hutchinson, Knox Thomas. Born near Fayetteville in Tennessee on October 5, 1894. He received degrees of bachelor of arts and master of arts from George Peabody College for Teachers and took additional graduate work at Vanderbilt University and the University of Tennessee. He taught in high schools and was on the staff of Murfreesboro Teachers College. Hutchinson was active in rural electrification cooperative organizations and served in the Tennessee State Senate. He was Assistant Secretary of Agriculture from August 5, 1949, to January 20, 1953, when he returned to farming in Tennessee. He died on June 30, 1957.

Hutson, John B. Born near Murray, Ky., on September 7, 1890. He graduated from Western Kentucky State Normal School and taught in rural schools. He received the degrees of bachelor of science in agricultural economics at the University of Kentucky, master of science in agricultural economics at the University of Wisconsin, and doctor of philosophy in agriculture from Columbia University. He was a career employee of the Department of Agriculture, working in the Office of Farm Management and Farm Economics, the Bureau of Agricultural Economics, the Agricultural Adjustment Administration, the Food Production Administration, the Commodity Credit Corporation, and the Production and Marketing Administration. He also worked in the Office of War Mobilization and Reconversion. Hutson was Under Secretary of Agriculture from June 30, 1945, to March 22, 1946, when he resigned to become Deputy Secretary General of the United Nations. Later he was with the Office of Price Stabilization and the Office of Economic Stabilization.

Hyde, Arthur Mastick. Born in Princeton, Mo., on July 12, 1877. He graduated from the University of Michigan and the law school of the State University of Iowa. He was a lawyer, businessman, and insurance executive. He was elected Governor of Missouri in 1920. Hyde served as Secretary of Agriculture from March 6, 1929, to March 4, 1933. He returned to private law practice in Trenton, Mo., and died October 17, 1947.

Jardine, William Marion. Born in Malad Valley, Oneida County, Idaho, on January 16, 1879. He graduated from Utah State Agricultural College and took graduate courses at the University of Illinois. He taught at Utah State Agricultural College and Kansas State Agricultural College. He became dean of agriculture, director of the agricultural experiment station, and finally president of Kansas State Agricultural College. He served as Secretary of Agriculture from March 5, 1925, until March 4, 1929. Jardine was later United States Minister to Egypt and president of the University of Wichita, Kansas. He died on January 17, 1955.

Jones, Marvin. Born near Valley View, Cooke County, Tex., on February 26, 1886. He graduated from Southwestern University, Georgetown, Tex., and received a law degree from the University of Texas. He was admitted to the bar and began to practice law. He served as a member of the United States House of Representatives for 12 Congresses, until he was appointed as a judge of the United States Court of Claims. While on leave from the Court of Claims, he served as adviser and assistant to the Director of Economic Stabilization. He became War Food Administrator on June 29, 1943, serving until June 30, 1945, when he resumed his duties as judge of the United States Court of Claims.

Le Duc, William Gates. Born in Wilkesville, Gallia County, Ohio, on March 29, 1823. He had been a soldier, railroad promoter, and farmer. In 1856, he

started the manufacture and marketing of flour made from Minnesota spring wheat. He became Commissioner of Agriculture on July 1, 1877, and served until June 30, 1881. Later he was appointed as a receiver of the National Bank at Fayetteville, N.C. He died on October 30, 1917.

Loring, George Bailey. Born in North Andover, Mass., on November 3, 1817. He graduated from Harvard College and became a physician and surgeon in the Marine Hospital at Chelsea, Mass. He left this position in 1850 and devoted the rest of his life to agriculture and politics. He operated a stock farm. He was a member of the Massachusetts House of Representatives and Senate and of the United States House of Representatives from 1877 to 1881. He became Commissioner of Agriculture on July 1, 1881, and served until April 3, 1885. Later he was appointed Minister to Portugal. He died on September 14, 1891.

Loveland, Albert Joel. Born in Janesville, Iowa, on May 8, 1893. He was a farm owner and operator for many years. From 1935 on, he was active in the Agricultural Adjustment Administration and successor agencies, from county to national levels. In 1947 he became Director of the Agricultural Conservation Programs Branch of the Production and Marketing Administration. Loveland was Under Secretary of Agriculture from June 30, 1948, to March 27, 1950. He died August 7, 1961.

McConnell, James Asher. Born on August 25, 1891, in Mansfield, Pa. He graduated from Mansfield Normal College and Cornell University, where he took additional graduate work. He operated a farm and for many years he was general manager of the Grange League Federation Exchange at Ithaca, N.Y. After serving as Administrator of the Commodity Stabilization Service for a year, McConnell became Assistant Secretary of Agriculture for Agricultural Stabilization, serving from January 24, 1955, to December 31, 1955. He then combined the operation of his farm near Mansfield, Pa., with part-time teaching in the Graduate School of Business Administration, Cornell University.

McCormick, Clarence James. Born in Indiana on March 26, 1902. He attended Indiana State Teachers College. His occupation was farming. He had also taught school and worked in agricultural administration, from county to national level. McCormick served as Under Secretary of Agriculture from July 28, 1950, to January 20, 1953. He then returned to farming in Indiana.

McLain, Marvin Leland. Born on October 1, 1906, in Brooklyn, Iowa. He received the degree of bachelor of science from Iowa State College, and became a farmer, merchant, and agricultural leader. He was county chairman under the Agricultural Adjustment Administration and was employed in the Commodity Credit Corporation. He served as Assistant Secretary of Agriculture for Agricultural Stabilization from January 30, 1956, to November 30, 1960. McLain then became assistant legislature director of the American Farm Bureau Federation.

Meredith, Edwin Thomas. Born on December 23, 1876, Avoca, Polk County, in Iowa. After studying at Highland Park College in Des Moines, he became an agricultural journalist. He founded *Successful Farming* and *Better Homes and Gardens*. He participated in Iowa politics and served in various business and governmental positions. Meredith was Secretary of Agriculture from February 2, 1920, to March 4, 1921. He resumed his career in journalism. He died on June 17, 1928.

Miller, Clarence Ludlow. Born in Louisville, Ky., on November 12, 1912. He attended the University of Kentucky and Western Kentucky State College. He took over the operation of the family farm. He worked with departmental programs at the county and State level before coming to the Commodity Stabilization Service. Miller served as Assistant Secretary of Agriculture for Marketing and Foreign Agriculture from December 22, 1958, to January 20, 1961. In 1961 he became vice president of the American Stockyards Association.

Morse, True Delbert. Born near Carthage, Mo., on January 21, 1896. He received the degrees of bachelor of science from the University of Missouri

and bachelor of law from LaSalle Extension University. He was a farmer, economist with the University of Missouri, and lawyer. From 1943 to 1952 he was president of Doane Agricultural Service. Morse was Under Secretary of Agriculture from January 21, 1953, to January 20, 1961. Since then he has been a business and agricultural consultant.

Morton, Julius Sterling. Born in Adams, Jefferson County, N.Y., on April 22, 1832. After attending the University of Michigan, he moved to Nebraska Territory. For a number of years he edited the *Nebraska City News* and farmed a quarter section adjacent to Nebraska City. He served as a member of the Territorial legislature, as Territorial secretary, and as Acting Governor. He was repeatedly a candidate for Governor and Senator. He was Secretary of Agriculture from March 7, 1893, to March 5, 1897. He died April 27, 1902.

Murphy, Charles Springs. Born on August 20, 1909, in Wallace, N.C. He received degrees of bachelor of arts and bachelor of law from Duke University. He served as a law assistant in the Office of the Senate Legislative Counsel and as Assistant Legislative Counsel to the Senate. Later he became Administrative Assistant to President Truman and Special Counsel to the President. In 1953 he entered private practice in Washington, D.C. He operates a 750-acre farm near Durham, N.C., on which tobacco is the principal crop. He became Under Secretary of Agriculture on March 21, 1961.

Newton, Isaac. Born on March 31, 1800, in Burlington County, N.J. He became a prominent dairy farmer in southern Pennsylvania. As a member of the Pennsylvania State Agricultural Society and the United States Agricultural Society, he advocated the establishment of a Federal department of agriculture. In 1861, Newton was named Superintendent of the Agricultural Division of the Patent Office, and on July 1, 1862, he became the first Commissioner of Agriculture when the United States Department of Agriculture was established by law. He served until his death on June 19, 1867.

Ousley, Clarence. Born in Lowndes County, Ga., on December 29, 1863. He graduated from Alabama Agricultural and Mechanical College. He became a journalist in Texas, editor of *Farm and Ranch*, and founded the *Fort Worth Record*. He was director of extension work at the Agricultural and Mechanical College of Texas. Ousley was Assistant Secretary of Agriculture from August 21, 1917, to July 31, 1919. Later he was a business executive. He died on August 5, 1948.

Paarlberg, Don. Born in Oak Glen, Ill., on June 20, 1911. He graduated with a major in agronomy from Purdue University and received the degree of doctor of philosophy in agricultural economics from Cornell University. He taught agricultural economics at Purdue University. After serving as a special assistant to Secretary Benson, Paarlberg became Assistant Secretary of Agriculture for Marketing and Foreign Agriculture on August 20, 1957, and he remained in that position until October 7, 1958. Then he became an economic adviser to the President. In 1961 he returned to Purdue University.

Pearson, Raymond Allen. Born in Evansville, Ind., on April 9, 1873. He received the degrees of bachelor of science and master of science in agriculture from Cornell University. Later he was employed in the Bureau of Animal Industry of the Department of Agriculture. He then became professor of dairy industry at Cornell University and was New York Commissioner of Agriculture. He left this latter position to become president of Iowa State College. He was on a leave of absence from the college while he served as Assistant Secretary of Agriculture, from August 21, 1917, to August 22, 1918. Subsequently, he became president of the University of Maryland and a special assistant in the Farm Security Administration. He died on February 13, 1939.

Peterson, Ervin Leroy. Born in North Bend, Oreg., on September 18, 1909. He attended the University of California. He was a dairy farmer, agricultural leader, and director of the Oregon State Department of Agriculture. Peterson was Assistant Secretary of Agriculture for Federal-States Relations from November 15, 1954, to September 16, 1960. Then he became director of the Milk Industry Foundation.

Pugsley, Charles William. Born in Woodbine, Iowa, on August 12, 1878. He graduated from Woodbine Normal School and taught there. After he received the degree of bachelor of science in agriculture at the University of Nebraska, he taught animal husbandry, agronomy, and farm management. He was State statistical agent, leader in demonstration and boys' and girls' work, and director of Nebraska extension work. Pugsley entered the field of agricultural journalism and was editor of the *Nebraska Farmer* when he became Assistant Secretary of Agriculture on October 1, 1921, remaining in the position until September 14, 1923. He then became president of South Dakota State College. He died on December 17, 1940.

Ralph, James Tyree. Born in Goodlettsville, Tenn., on April 28, 1926. He received the degree of bachelor of science in agriculture from Middle Tennessee State College, master of science in agricultural economics and statistics from Iowa State College, and doctor of philosophy in agricultural economics from the Food Research Institute of Stanford University. He taught at the University of Kentucky and later worked for the California State Department of Agriculture. On March 20, 1961, he became Assistant Secretary of Agriculture for Agricultural Stabilization, serving until February 20, 1962.

Riggs, James Reed. Born in Shelburn, Ind., on February 17, 1863. He devoted most of his life to farming except for a short time when he was a drainage tile manufacturer and banker. He was Assistant Secretary of Agriculture from September 22, 1919, to March 31, 1920.

Rizley, Ross. Born near Beaver, Okla., on July 5, 1892. He taught in the rural schools of Beaver County and held several county offices. He received his law degree from the University of Kansas City, later practicing law in Oklahoma. He was a member of the Oklahoma State Senate and an unsuccessful candidate for Governor. He was a member of the United States House of Representatives from 1941 to 1949. He served as Assistant Secretary of Agriculture for Agricultural Stabilization from December 17, 1953, to December 16, 1954. After serving as a member and Chairman of the Civil Aeronautics Board, he was appointed as a judge in Oklahoma.

Roberts, Ralph Standish. Born in Lehi, Utah, on November 30, 1905. He studied at the University of Utah and George Washington University, specializing in economics and business administration. He received his degrees of bachelor and master of laws from George Washington University. After many years of Government service, he became Director of Finance and Budget Officer for the Department of Agriculture in 1949. From September 1, 1953, to February 20, 1961, Roberts was Administrative Assistant Secretary of Agriculture. He then served in the State Department.

Robertson, Joseph Moorman. Born in Glen Dean, Ky., on January 11, 1916. He received degrees of bachelor of arts from Western Kentucky State College and master of arts from the University of Alabama, in public administration and economics. He also studied at the University of Minnesota. He taught at the University of Alabama and, at intervals, at the University of Minnesota. Robertson was a tax expert in the Kentucky and Minnesota State governments, becoming commissioner of taxation in Minnesota. He was Chief of the Government Division of the United States Bureau of the Census, when he was appointed Administrative Assistant Secretary of Agriculture, on April 11, 1961.

Rusk, Jeremiah McLain. Born in Malta, Morgan County, Ohio, on June 17, 1830. In addition to farming, he held local and State positions and engaged in several business undertakings. He served in the Wisconsin State Assembly, was a member of the United States House of Representatives, 1871-77, and had three terms as Governor of Wisconsin. He was Secretary of Agriculture from March 6, 1889, to March 6, 1893. He died on November 21, 1893.

Scott, Kenneth Leroy. Born in Chicago, Ill., February 2, 1899. He was associated with the Idaho Banking Department, Livestock Credit Corporation of Pocatello, Idaho, and the United States Farm Credit Administration. He served as Director of Agricultural Credit from April 5, 1954, to February 24,

1961. He then became agricultural credit specialist for the Inter-American Development Bank.

Short, Romeo Ennis. Born in Melvin, Ill., on April 8, 1897. He attended Iowa State Teachers College. Before World War I, he raised wheat in Saskatchewan, Canada. After the war, he went to Arkansas, where he raised rice, cotton, and livestock. He was one of the founders and a president of the Arkansas Rice Growers' Cooperative Association, president of the Arkansas Farm Bureau Federation, vice president of the American Farm Bureau Federation, a member of the board of directors of the Little Rock branch of the Federal Reserve Bank of St. Louis. He served in the Department of Agriculture on the staff of the Secretary's Office and as Director of the Foreign Agricultural Service. He was appointed as Assistant Secretary on July 21, 1953, and resigned September 27, 1953. He died in May 1954.

Stokes, John W. A native of New Jersey but a resident of Pennsylvania, he was Chief Clerk of the Department when his uncle, Isaac Newton, was Commissioner of Agriculture. Following the death of Newton on June 19, 1867, Stokes became Acting Commissioner and served until December 4 of that year, when Horace Capron was appointed.

Tugwell, Rexford Guy. Born in Sinclairville, N.Y., on July 10, 1891. He received the degrees of bachelor of science, master of arts, and doctor of philosophy at the University of Pennsylvania. He then taught economics at the University of Pennsylvania, University of Washington, and Columbia University. He was Assistant Secretary from March 7, 1933, to June 18, 1934. He was then appointed the first Under Secretary of Agriculture (a position created in 1934), serving until December 31, 1936. Later he was Governor of Puerto Rico and taught political science at the University of Chicago.

Vrooman, Carl Schurz. Born in Missouri on October 25, 1872. He attended Washburn College in Topeka, Kans., Harvard University, and Oxford University in England. Returning to this country, he engaged in farming in Illinois and Iowa. He also wrote articles on agricultural topics and was a contributor to *McClure's*, *Outlook*, and *La Follette's Weekly*. He was a regent of Kansas State Agricultural College. He served as Assistant Secretary from August 17, 1914, to December 31, 1918. Vrooman then returned to farming and writing.

Wallace, Henry Agard. Born near Orient, Iowa, on October 7, 1888. He graduated from Iowa State College. He then went to work on the family paper, the *Wallaces' Farmer*, and on developing hybrid corn. When his father, Henry C. Wallace, became Secretary of Agriculture, he succeeded him as editor of the paper. Henry A. Wallace was Secretary of Agriculture from March 4, 1933, to September 4, 1940. After serving as Vice President of the United States, he became Secretary of Commerce. Wallace was a candidate for President of the United States in 1948 on the Progressive ticket. More recently, he has been engaged in research in genetics.

Wallace, Henry Cantwell. Born in Rock Island, Ill., on May 11, 1866, and grew up on the family farm in Iowa. He graduated from Iowa State College with the degree of bachelor of science in agriculture. Later he taught dairying there. He became interested in agricultural journalism and joined the staff of the family paper which was to be called the *Wallaces' Farmer*. He became its editor in 1916 when his father died. Henry C. Wallace became Secretary of Agriculture on March 5, 1921, and served until his death in office on October 25, 1924.

Watts, Frederick. Born on May 9, 1801, in Carlisle, Pa. He attended Dickinson College and later studied law. He was a promoter of scientific farming, lawyer, judge, and railroad president, retiring in 1869 to one of his farms near Carlisle. He had been active in Pennsylvania agricultural societies and worked for the charter of the Farmers' High School, later the Pennsylvania State College. As a member of the United States Agricultural Society he had supported the establishment of a Federal department of agriculture. Watts served as Commissioner of Agriculture from August 1, 1871, to June 30, 1877. He died on August 17, 1889.

Welch, Frank James. Born on August 2, 1902, in Winfield, Tex. He received the degrees of bachelor of arts in economics from the University of Mississippi; master of arts in economics, marketing, and public administration from the University of Colorado; and doctor of philosophy in agricultural economics from the University of Wisconsin. He was head of the department of economics and sociology and later dean of agriculture and director of the experiment station at Mississippi State College. He also served as dean of the College of Agriculture, director of the extension division, and director of the experiment station at the University of Kentucky. For 2 years he was a director of the Tennessee Valley Authority. He became Assistant Secretary for Federal-States Relations on February 27, 1961, and resigned July 18, 1962.

Wickard, Claude Raymond. Born in Carroll County, Ind., on February 28, 1893. He graduated from Purdue University, specializing in animal husbandry, and returned to farming. He was selected as a Master Farmer in 1927. He was a member of the Indiana State Senate. During the 1930's he worked in the Agricultural Adjustment Administration. On March 1, 1940, he became Under Secretary, and on September 5 of the same year was appointed Secretary of Agriculture. On June 29, 1945, he was appointed Administrator of the Rural Electrification Administration, holding the position until 1953. At this time, he returned to farming.

Willits, Edwin. Born on April 24, 1830, at Otto, Cattaraugus County, N.Y. He graduated from the University of Michigan and studied law. He was a lawyer, editor, United States Congressman from March 4, 1877, to March 3, 1883, and president of Michigan Agricultural College. Willits was the first person to serve as Assistant Secretary of Agriculture, from March 23, 1889, to December 31, 1893. He was retained after a change of administration to complete his work as Chairman of the Government Board for the Columbian Exposition in 1893. He remained in Washington to practice law. He died on October 22, 1896.

Wilson, James (Tama Jim). Born on August 16, 1835, in Ayrshire, Scotland. He attended Iowa (now Grinnell) College. He engaged in farming, devoting special attention to livestock feeding and raising purebred animals. He was elected to the Iowa House of Representatives and became its speaker. This prepared Tama Jim for membership in the United States House of Representatives, 1873-77 and 1883-85. He taught at Iowa Agricultural College and was director of the experiment station. Wilson was Secretary of Agriculture from March 6, 1897, to March 5, 1913, the longest term of any Cabinet member and under three Presidents. He wrote for various farm journals and was editor of the *Agricultural Digest*. He died August 26, 1920.

Wilson, Milburn Lincoln. Born on October 23, 1885, in Atlantic, Iowa. He received degrees of bachelor of science in agriculture from Iowa State College and master of science from the University of Wisconsin. From 1906 to 1924 he was active in agricultural extension work in South Dakota, Iowa, and Montana. He managed a number of large farms and taught agricultural economics at Montana State College. He was employed in the Bureau of Agricultural Economics, the Agricultural Adjustment Administration, and the Department of the Interior to head a Subsistence Homesteads Division. He was appointed as Assistant Secretary of Agriculture on July 2, 1934, and Under Secretary of Agriculture on January 2, 1937. He left the latter position on January 31, 1940, to become Director of Extension Work, serving until 1953. He then served as a consultant for the Ford Foundation.

Commissioners and Secretaries of Agriculture and Heads of United States Department of Agriculture Agencies

[This list includes agencies transferred to or from the USDA while the agencies were in the Department]

COMMISSIONERS OF AGRICULTURE

Isaac Newton.....	July 1, 1862-June 19, 1867.
John W. Stokes.....	June 20, 1867-December 4, 1867.
Horace Capron.....	December 4, 1867-July 31, 1871.
Frederick Watts.....	August 1, 1871-June 30, 1877.
William Gates Le Duc.....	July 1, 1877-June 30, 1881.
George Bailey Loring.....	July 1, 1881-April 3, 1885.
Norman Jay Colman.....	April 3, 1885-February 15, 1889.

SECRETARIES OF AGRICULTURE

Norman Jay Colman.....	February 15, 1889-March 6, 1889.
Jeremiah McLain Rusk.....	March 6, 1889-March 6, 1893.
Julius Sterling Morton.....	March 7, 1893-March 5, 1897.
James Wilson.....	March 6, 1897-March 5, 1913.
David Franklin Houston.....	March 6, 1913-February 2, 1920.
Edwin Thomas Meredith.....	February 2, 1920-March 4, 1921.
Henry Cantwell Wallace.....	March 5, 1921-October 25, 1924.
Howard Mason Gore.....	November 22, 1924-March 4, 1925.
William Marion Jardine.....	March 5, 1925-March 4, 1929.
Arthur Mastick Hyde.....	March 6, 1929-March 4, 1933.
Henry Agard Wallace.....	March 4, 1933-September 4, 1940.
Claude Raymond Wickard.....	September 5, 1940-June 29, 1945.
Clinton Presba Anderson.....	June 30, 1945-May 10, 1948.
Charles Franklin Brannan.....	June 2, 1948-January 20, 1953.
Ezra Taft Benson.....	January 21, 1953-January 20, 1961.
Orville Lothrop Freeman.....	January 21, 1961-.

UNDER SECRETARIES OF AGRICULTURE

Rexford Guy Tugwell.....	June 19, 1934-December 31, 1936.
Milburn Lincoln Wilson.....	January 2, 1937-January 31, 1940.
Claude Raymond Wickard.....	March 1, 1940-September 4, 1940.
Paul Henson Appleby.....	September 5, 1940-January 31, 1944.
Grover Bennett Hill.....	February 26, 1944-June 29, 1945.
John B. Hutson.....	June 30, 1945-March 22, 1946.
Norris Edward Dodd.....	April 8, 1946-June 7, 1948.
Albert Joel Loveland.....	June 30, 1948-March 27, 1950.
Clarence James McCormick.....	July 28, 1950-January 20, 1953.
True Delbert Morse.....	January 21, 1953-January 20, 1961.
Charles Springs Murphy.....	March 21, 1961-.

ASSISTANT SECRETARIES OF AGRICULTURE

Edwin Willits.....	March 23, 1889–December 31, 1893.
Charles William Dabney, Jr.....	January 1, 1894–March 22, 1897.
Joseph Henry Brigham.....	March 23, 1897–June 29, 1904.
Willet Martin Hays.....	December 21, 1904–March 7, 1913.
Beverly Thomas Galloway.....	March 17, 1913–July 31, 1914.
Carl Schurz Vrooman.....	August 17, 1914–December 31, 1918.
Clarence Ousley.....	August 21, 1917–July 31, 1919.
Raymond Allen Pearson.....	August 21, 1917–August 22, 1918.
George Irving Christie.....	October 14, 1918–June 30, 1919.
James Reed Riggs.....	September 22, 1919–March 31, 1920.
Elmer Darwin Ball.....	June 12, 1920–September 30, 1921.
Charles William Pugsley.....	October 1, 1921–September 14, 1923.
Howard Mason Gore.....	September 17, 1923–November 21, 1924.
Renick William Dunlap.....	April 1, 1925–March 6, 1933.
Rexford Guy Tugwell.....	March 7, 1933–June 18, 1934.
Milburn Lincoln Wilson.....	July 2, 1934–January 1, 1937.
Harry Lawrence Brown.....	January 2, 1937–December 5, 1939.
Grover Bennett Hill.....	December 21, 1939–February 25, 1944.
Charles Franklin Brannan.....	June 21, 1944–June 2, 1948.
Knox Thomas Hutchinson.....	August 5, 1949–January 20, 1953.
James Earl Coke.....	January 21, 1953–November 14, 1954.
Richard David Aplin.....	July 13, 1953–August 31, 1953.
John Herbert Davis.....	July 21, 1953–July 31, 1954.
Romeo Ennis Short.....	July 21, 1953–September 27, 1953.
Ralph Standish Roberts.....	September 1, 1953–February 20, 1961.
Ross Rizley.....	December 17, 1953–December 16, 1954.
Earl Lauer Butz.....	August 2, 1954–July 31, 1957.
Ervin Leroy Peterson.....	November 15, 1954–September 16, 1960.
James Asher McConnell.....	January 24, 1955–December 31, 1955.
Marvin Leland McLain.....	January 30, 1956–November 30, 1960.
Don Paarlberg.....	August 20, 1957–October 7, 1958.
Clarence Ludlow Miller.....	December 22, 1958–January 20, 1961.
Clarence Meadd Ferguson.....	September 17, 1960–January 20, 1961.
John Paul Duncan, Jr.....	February 27, 1961–.
Frank James Welch.....	February 27, 1961–July 18, 1962.
James Tyree Ralph.....	March 20, 1961–February 20, 1962.
Joseph Moorman Robertson.....	April 11, 1961–.
John Austin Baker.....	August 3, 1962–.

HEADS OF USDA AGENCIES

ADMINISTRATIVE MANAGEMENT, OFFICE OF, 1957–61

Joseph P. Loftus..... 1957–61

AGRICULTURAL ADJUSTMENT ADMINISTRATION, 1933–42

George N. Peek.....	1933	Rudolph M. Evans.....	1938–41
Chester C. Davis.....	1933–36	Fred S. Wallace.....	1941–42
Howard R. Tolley.....	1936–38		

AGRICULTURAL ADJUSTMENT AGENCY, 1942–45

Fred S. Wallace.....	1942–43	Norris E. Dodd.....	1943–45
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AGRICULTURAL AND INDUSTRIAL CHEMISTRY, BUREAU OF, 1943–53

William W. Skinner.....	1943–44	Louis B. Howard.....	1946–48
Orville E. May.....	1944–46	Guido Edward Hilbert.....	1948–53

AGRICULTURAL CHEMISTRY AND ENGINEERING, BUREAU OF, 1938-43

Henry G. Knight..... 1938-42 William W. Skinner..... 1942-43

AGRICULTURAL CONSERVATION AND ADJUSTMENT ADMINISTRATION, 1942

Rudolph M. Evans..... 1942 M. Clifford Townsend..... 1942

AGRICULTURAL CONSERVATION PROGRAM SERVICE, 1953-61

Donald A. Williams..... 1953 Paul M. Koger..... 1955-61
Fred G. Ritchie..... 1953-55

AGRICULTURAL CREDIT, DIRECTOR, 1953-62

Robert L. Farrington..... 1953-54 John A. Baker..... 1961-62
Kenneth L. Scott..... 1954-61

AGRICULTURAL DEFENSE RELATIONS, OFFICE OF, 1941-42

John B. Hutson..... 1941 M. Clifford Townsend..... 1941-42

AGRICULTURAL ECONOMICS, BUREAU OF, 1922-53

Henry C. Taylor..... 1922-25 Albert G. Black..... 1935-38
Thomas P. Cooper..... 1925-26 Howard R. Tolley..... 1938-46
Lloyd S. Tenny..... 1926-28 Oris V. Wells..... 1946-53
Nils A. Olsen..... 1928-35

AGRICULTURAL ECONOMICS, DIRECTOR, 1961-

Willard W. Cochrane..... 1961-

AGRICULTURAL ENGINEERING, BUREAU OF, 1931-38

S. H. McCrory..... 1931-38

AGRICULTURAL MARKETING ADMINISTRATION, 1942

Roy F. Hendrickson..... 1942

AGRICULTURAL MARKETING SERVICE, 1939-42

Clarence W. Kitchen..... 1939-42 Roy F. Hendrickson..... 1942

AGRICULTURAL MARKETING SERVICE, 1953-

Oris V. Wells..... 1953-61 S. R. Smith..... 1961-

AGRICULTURAL RESEARCH ADMINISTRATION, 1942-53

Eugene C. Auchter..... 1942-45 Philip V. Cardon..... 1948-50
Philip V. Cardon..... 1945-46 Byron T. Shaw..... 1951-53
William V. Lambert..... 1946-48

AGRICULTURAL RESEARCH SERVICE, 1953-

Byron T. Shaw..... 1953-

AGRICULTURAL SOILS, DIVISION OF, 1894-97

Milton Whitney..... 1894-97

AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE, 1961-

Horace D. Godfrey..... 1961-

AGRICULTURAL WAR RELATIONS, OFFICE FOR, 1942

M. Clifford Townsend..... 1942 Samuel B. Bledsoe..... 1942

AGROSTOLOGY, DIVISION OF, 1895-1901

Frank Lamson-Scribner.. 1895-1901

ANIMAL INDUSTRY, BUREAU OF, 1884-1953

Daniel E. Salmon.....	1884-1905	Arthur W. Miller.....	1943-45
Alonzo D. Melvin.....	1905-17	Bennett T. Simms.....	1945-53
John R. Mohler.....	1917-43		

BASIC COMMODITIES, OFFICE OF, 1945

Carl C. Farrington..... 1945

BIOLOGICAL SURVEY, BUREAU OF, 1905-39

C. Hart Merriam.....	1905-10	Paul G. Redington.....	1927-34
Henry W. Henshaw.....	1910-16	Jay N. Darling.....	1934-35
Edward W. Nelson.....	1916-27	Ira N. Gabrielson.....	1935-39

BIOLOGICAL SURVEY, DIVISION OF, 1896-1905

C. Hart Merriam.....1896-1905

BOTANY, DIVISION OF, 1868-1901

Charles C. Parry.....	1869-71	Frederick V. Coville.....	1893-1901
George Vasey.....	1872-93		

BUDGET AND FINANCE, OFFICE OF, 1934-

William A. Jump.....	1934-48	Joseph C. Wheeler.....	1953-57
Ralph S. Roberts.....	1949-53	Charles L. Grant.....	1957-

CHEMISTRY, BUREAU OF, 1901-27

Harvey W. Wiley.....	1901-12	Charles A. Browne.....	1923-27
Carl L. Alsberg.....	1912-21		

CHEMISTRY, DIVISION OF, 1862-1901

Charles M. Wetherill.....	1862-63	William McMurtrie.....	1873-78
Henri Erni.....	1864-66	Peter Collier.....	1878-83
Thomas Antisell.....	1866-71	Harvey W. Wiley.....	1883-1901
Ryland T. Brown.....	1872-73		

CHEMISTRY AND SOILS, BUREAU OF, 1927-38

Henry G. Knight.....1927-38

CIVILIAN CONSERVATION CORPS ACTIVITIES, OFFICE OF, 1938-43

Fred Morrell.....1938-43

COMMODITY CREDIT CORPORATION, PRESIDENT OF, 1933-

Lynn P. Talley.....	1933-39	Ralph S. Trigg.....	1948-51
Carl B. Robbins.....	1939-41	Gus F. Geissler.....	1951-53
John B. Hutson.....	1941-44	John H. Davis.....	1953
Frank Hancock.....	1944-45	Howard H. Gordon.....	1953-54
John B. Hutson.....	1945-46	True D. Morse.....	1954-61
Robert H. Shields.....	1946	Horace D. Godfrey.....	1961
Jesse B. Gilmer.....	1947-48		

COMMODITY EXCHANGE ADMINISTRATION, 1936-42

J. W. T. Duvel.....	1936-40	Joseph M. Mehl.....	1940-42
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COMMODITY EXCHANGE AUTHORITY, 1947-

Joseph M. Mehl-----	1947-54	Alex C. Caldwell-----	1960-
Roger R. Kauffman-----	1955-59		

COMMODITY STABILIZATION SERVICE, 1953-61

Howard H. Gordon-----	1953-54	Walter C. Berger-----	1956-61
James A. McConnell-----	1954-55	Horace D. Godfrey-----	1961
Earl M. Hughes-----	1955-56		

COOPERATIVE STATE EXPERIMENT STATION SERVICE, 1961-

George A. Selke-----	1961-62	Theodore C. Byerly-----	1962-
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CROP ESTIMATES, BUREAU OF, 1914-21

Leon Estabrook-----	1914-21	Nat C. Murray-----	1921
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DAIRY INDUSTRY, BUREAU OF, 1926-53

Carl W. Larson-----	1926-27	Ollie E. Reed-----	1928-53
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DAIRYING, BUREAU OF, 1924-26

Carl W. Larson-----	1924-26
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DISTRIBUTION, OFFICE OF, 1944

M. Lee Marshall-----	1944
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ECONOMIC ORNITHOLOGY AND MAMMALOGY, DIVISION OF, 1886-96

C. Hart Merriam-----	1886-96
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ECONOMIC RESEARCH SERVICE, 1961-

Nathan M. Koffsky-----	1961-
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EMERGENCY FOOD PROGRAM, OFFICE OF, 1946

Walter Straub-----	1946	Paul C. Stark-----	1946
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ENTOMOLOGY, BUREAU OF, 1904-34

Leland O. Howard-----	1904-27	Lee A. Strong-----	1933-34
Charles L. Marlatt-----	1927-33		

ENTOMOLOGY, DIVISION OF, 1863-1904

Townend Glover-----	1863-78	Charles V. Riley-----	1881-94
Charles V. Riley-----	1878-79	Leland O. Howard-----	1894-1904
John H. Comstock-----	1879-81		

ENTOMOLOGY AND PLANT QUARANTINE, BUREAU OF, 1934-53

Lee A. Strong-----	1934-41	Avery S. Hoyt-----	1950-53
Percy N. Annand-----	1941-50		

EXPERIMENT STATIONS, OFFICE OF, 1888-1955

Wilbur O. Atwater-----	1888-91	Edwin W. Allen-----	1915-29
Abram W. Harris-----	1891-93	James T. Jardine-----	1931-46
Alfred Charles True-----	1893-1915	Robert W. Trullinger----	1946-55

EXTENSION SERVICE, 1923-

Clyde W. Warburton-----	1923-40	Paul V. Kepner-----	1960-61
Milburn L. Wilson-----	1940-53	E. T. York, Jr-----	1961-
Clarence M. Ferguson-----	1953-60		

EXTENSION WORK, OFFICE OF, 1921-23

Clarence B. Smith----- 1921-23

EXTENSION WORK IN THE NORTH AND WEST, OFFICE OF, 1915-21

Clarence B. Smith----- 1915-21

EXTENSION WORK IN THE SOUTH, OFFICE OF, 1915-21

Bradford Knapp----- 1915-20 J. A. Evans----- 1920-21

FARM CREDIT ADMINISTRATION

Forrest F. Hill----- 1938-39 Ivy W. Duggan----- 1944-53
Albert G. Black----- 1939-44 C. R. Arnold----- 1953

FARM MANAGEMENT, OFFICE OF, 1915-19

William Jasper Spillman-- 1915-18 Henry C. Taylor----- 1919

FARM MANAGEMENT AND FARM ECONOMICS, OFFICE OF, 1919-22

Henry C. Taylor----- 1919-21

FARM SECURITY ADMINISTRATION, 1937-46

Will W. Alexander----- 1937-40 Frank Hancock----- 1943-45
Calvin B. Baldwin----- 1940-43 Dillard B. Lasseter----- 1946

FARMER COOPERATIVE SERVICE, 1953-

Joseph G. Knapp----- 1953-

FARMERS HOME ADMISISTRATION, 1946-

Dillard B. Lasseter----- 1946-53 Kermit H. Hansen----- 1956-61
Robert B. McLeaish----- 1953-56 Howard Bertsch----- 1961-

FEDERAL CROP INSURANCE CORPORATION, MANAGER OF, 1938-

Roy M. Green----- 1938 John W. Brainard----- 1952-53
Leroy K. Smith----- 1938-43 Charles S. Laidlaw----- 1953-55
J. Carl Wright----- 1943-46 Frank N. McCartney----- 1956-61
Gus F. Geissler----- 1946-51 John N. Luft----- 1961-

FEDERAL HORTICULTURAL BOARD, 1912-28

Charles L. Marlatt-----1912-28

FEDERAL SURPLUS COMMODITIES CORPORATION, PRESIDENT OF, 1935-45

Chester C. Davis----- 1935-36 Roy F. Hendrickson----- 1941-44
Jesse W. Tapp----- 1936-39 M. Lee Marshall----- 1944
Milo R. Perkins----- 1939-41 Ralph W. Olmstead----- 1945

FIXED NITROGEN RESEARCH LABORATORY, 1921-26

Richard C. Tolman----- 1921-22 Frederick G. Cottrell----- 1922-26

FOOD AND DRUG ADMINISTRATION

Walter G. Campbell----- 1930-40

FOOD AND FEED CONSERVATION, OFFICE FOR, 1948

Charles F. Brannan----- 1948

FOOD DISTRIBUTION ADMINISTRATION, 1942-44

Roy F. Hendrickson----- 1942-44

FOOD, DRUG, AND INSECTICIDE ADMINISTRATION, 1927-30

Walter G. Campbell----- 1927-30

FOOD PRODUCTION ADMINISTRATION, 1942-44

Herbert W. Parisius-----	1942-43	John B. Hutson-----	1943-44
M. Clifford Townsend-----	1943		

FOOD PRODUCTION AND DISTRIBUTION, ADMINISTRATION OF, 1943

Chester C. Davis----- 1943

FOREIGN AGRICULTURAL RELATIONS, OFFICE OF, 1939-53

Leslie A. Wheeler-----	1939-48	Francis A. Flood-----	1952
Dennis A. FitzGerald-----	1948-49	John J. Haggerty-----	1952-53
Stanley Andrews-----	1949-52		

FOREIGN AGRICULTURAL SERVICE, 1938-39

Leslie A. Wheeler----- 1938-39

FOREIGN AGRICULTURAL SERVICE, 1953-

Romeo E. Short-----	1953	Max Myers-----	1958-61
William G. Lodwick-----	1954-55	Robert C. Tetro-----	1961-62
Gwynn Garnett-----	1955-58	Raymond A. Ioanes-----	1962-

FOREIGN MARKETS, DIVISION OF, 1902-03

Frank H. Hitchcock----- 1902-03

FOREST COMMISSIONER, 1876-81

Franklin B. Hough----- 1876-81

FOREST SERVICE, 1905-

Gifford Pinchot-----	1905-10	Earle H. Clapp-----	1939-43
Henry S. Graves-----	1910-20	Lyle F. Watts-----	1943-52
William B. Greeley-----	1920-28	Richard E. McArdle-----	1952-62
Robert Y. Stuart-----	1928-33	Edward P. Cliff-----	1962-
Ferdinand A. Silcox-----	1933-39		

FORESTRY, BUREAU OF, 1901-05

Gifford Pinchot----- 1901-05

FORESTRY, DIVISION OF, 1881-1901

Franklin B. Hough-----	1881-83	Bernhard E. Fernow----	1886-98
Nathaniel H. Egleston--	1883-86	Gifford Pinchot-----	1898-1901

GARDENS AND GROUNDS, DIVISION OF, 1862-1900

William Saunders----- 1862-1900

GENERAL COUNSEL, 1956-

Robert L. Farrington-----	1956-59	Carl J. Stephens-----	1960-61
Frank A. Barrett-----	1959-60	John C. Bagwell-----	1961-

GRAIN FUTURES TRADING ACT, ADMINISTRATION OF THE, 1921-22

Chester Morrill----- 1921-22

GRAIN FUTURES ADMINISTRATION, 1922-36

Chester Morrill----- 1922-25 J. W. T. Duvel----- 1925-36

HEARING EXAMINERS, OFFICE OF, 1946-

Earl J. Smith----- 1947-53 G. Osmond Hyde----- 1956-

Glen J. Gifford----- 1953-56

HOME ECONOMICS, BUREAU OF, 1923-43

Louise Stanley----- 1923-43

HOME ECONOMICS, OFFICE OF, 1915-23

Charles F. Langworthy--- 1915-23

HUMAN NUTRITION AND HOME ECONOMICS, BUREAU OF, 1943-53

Henry C. Sherman----- 1943-44 Hazel K. Stiebeling----- 1944-53

INFORMATION, OFFICE OF, 1925-

Nelson A. Crawford----- 1925-28 Keith Himebaugh----- 1944-51

Milton S. Eisenhower----- 1928-40 R. Lyle Webster----- 1951-

Morse S. Salisbury----- 1941-44

LAND USE COORDINATOR, 1937-43

Milton S. Eisenhower----- 1937-42 Ernst H. Wiecking----- 1942-43

LIBRARY, 1867-

Aaron B. Grosh----- 1867-69 Josephine A. Clark----- 1901-07

Stuart Eldridge----- 1869-71 Claribel R. Barnett----- 1907-40

John B. Russell----- 1871-77 Ralph R. Shaw----- 1940-54

Ernestine Stevens----- 1877-93 Foster E. Mohrhardt----- 1954-

William P. Cutter----- 1893-1900

MANAGEMENT APPRAISAL AND SYSTEMS DEVELOPMENT, OFFICE OF, 1961-

John C. Cooper, Jr----- 1961-

MANAGEMENT OPERATIONS STAFF, 1961-

Charles F. Kiefer----- 1961-

MARKETING SERVICES, OFFICE OF, 1945

M. Lee Marshall----- 1945 Clarence W. Kitchen----- 1945

MARKETS, BUREAU OF, 1917-21

Charles J. Brand----- 1917-19 George Livingston----- 1919-21

MARKETS AND CROP ESTIMATES, BUREAU OF, 1921-22

Henry C. Taylor----- 1921-22

MICROSCOPY, DIVISION OF, 1871-95

Thomas Taylor----- 1871-95

PACKERS AND STOCKYARDS ADMINISTRATION, 1921-27

Chester Morrill----- 1921-25 John T. Caine III----- 1925-27

PERSONNEL, OFFICE OF, 1934-

Warner W. Stockberger----	1934-38	MacHenry G. Schafer-----	1954-56
Roy F. Hendrickson-----	1938-41	Ernest C. Betts-----	1956-61
T. Roy Reid-----	1941-54	Carl B. Barnes-----	1961-

PERSONNEL AND BUSINESS ADMINISTRATION, OFFICE OF, 1925-34

Warner W. Stockberger--- 1925-34

PLANT AND OPERATIONS, OFFICE OF, 1939-

Arthur B. Thatcher----- 1939-53 Francis R. Mangham----- 1953-

PLANT INDUSTRY, BUREAU OF, 1901-43

Beverly T. Galloway-----	1901-13	Frederick D. Richey-----	1934-38
William A. Taylor-----	1913-33	Eugene C. Auchter-----	1938-42
Knowles A. Ryerson-----	1934	Robert M. Salter-----	1942-43

PLANT INDUSTRY, OFFICE OF, 1900-01

Beverly T. Galloway----- 1900-01

PLANT INDUSTRY, SOILS, AND AGRICULTURAL ENGINEERING, BUREAU OF, 1943-53

Robert M. Salter----- 1943-51 Albert H. Moseman----- 1951-53

PLANT QUARANTINE, BUREAU OF, 1933-34

Lee A. Strong----- 1933-34

PLANT QUARANTINE AND CONTROL ADMINISTRATION, 1928-33

Charles L. Marlatt----- 1928-29 Lee A. Strong----- 1929-33

POMOLOGY, DIVISION OF, 1886-1901

Henry E. Van Deman---	1886-93	G. B. Brackett-----	1897-1901
Samuel B. Heiges-----	1893-97		

PRODUCTION, OFFICE OF, 1944

John B. Hutson----- 1944

PRODUCTION AND MARKETING ADMINISTRATION, 1945-53

John B. Hutson-----	1945-46	Ralph S. Trigg-----	1948-51
Robert H. Shields-----	1946	Gus F. Geissler-----	1951-53
Jesse B. Gilmer-----	1947-48	Howard H. Gordon-----	1953

PUBLIC ROADS, BUREAU OF

Thomas H. MacDonald---- 1919-39

PUBLIC ROADS, OFFICE OF, 1905-15

Logan W. Page----- 1905-15

PUBLIC ROADS AND RURAL ENGINEERING, OFFICE OF, 1915-18

Logan W. Page----- 1915-18

REGULATORY WORK, DIRECTOR OF, 1923-33

Walter G. Campbell----- 1923-33

RESEARCH, DIRECTOR OF, 1936-42

James T. Jardine----- 1936-41

RESEARCH AND MARKETING ACT, ADMINISTRATOR OF, 1946-49

Emanuel A. Meyer----- 1946-49

RESETTLEMENT ADMINISTRATION

Will W. Alexander----- 1937

ROAD INQUIRY, OFFICE OF, 1893-1905

Roy Stone----- 1893-1900 Martin Dodge----- 1900-04

RURAL AREAS DEVELOPMENT, OFFICE OF, 1961-

Almon T. Mace----- 1961-

RURAL ELECTRIFICATION ADMINISTRATION

Harry Slattery-----	1939-45	David A. Hamil-----	1956-61
Claude R. Wickard-----	1945-53	Norman M. Clapp-----	1961-
Ancher Nelson-----	1953-56		

SCIENTIFIC WORK, DIRECTOR OF, 1921-34

Elmer D. Ball----- 1921-25 Albert F. Woods----- 1926-34

SOIL CONSERVATION SERVICE, 1935-

Hugh H. Bennett-----	1935-51	Donald A. Williams-----	1953-
Robert M. Salter-----	1951-53		

SOIL EROSION SERVICE

Hugh H. Bennett----- 1935

SOILS, BUREAU OF, 1901-27

Milton Whitney----- 1901-27 A. G. McCall----- 1927

SOILS, DIVISION OF, 1897-1901

Milton Whitney----- 1897-1901

SOLICITOR, 1905-56

George P. McCabe-----	1905-13	Mastin G. White-----	1935-42
Francis G. Caffey-----	1913-17	Robert H. Shields-----	1942-46
William M. Williams-----	1917-20	W. Carroll Hunter-----	1946-53
Robert W. Williams-----	1920-29	Karl D. Loos-----	1953-54
Elton L. Marshall-----	1929-33	Robert L. Farrington-----	1954-56
Seth Thomas-----	1933-35		

STATES RELATIONS SERVICE, 1915-23

Alfred Charles True----- 1915-23

STATISTICAL REPORTING SERVICE, 1961-

Harry C. Trelogan----- 1961-

STATISTICS, BUREAU OF, 1903-14

John Hyde----- 1903-05 Leon Estabrook----- 1913-14
Victor H. Olmstead----- 1906-13

STATISTICS, DIVISION OF, 1863-1903

Lewis Bollman----- 1863-65 Jacob R. Dodge----- 1881-93
Jacob R. Dodge----- 1865-78 Henry A. Robinson----- 1893-97
Charles Worthington----- 1878-81 John Hyde----- 1897-1903

SUGAR AGENCY, 1942

Joshua Bernhardt----- 1942

SUGAR DIVISION, 1938-42

Joshua Bernhardt----- 1938-42

SUGAR RATIONING ADMINISTRATION, 1947-48

Irvin L. Rice----- 1947-48

SUPPLY, OFFICE OF, 1945

M. Lee Marshall----- 1945 Ralph W. Olmstead----- 1945

SURPLUS MARKETING ADMINISTRATION, 1940-42

Milo R. Perkins----- 1940-41 Roy F. Hendrickson----- 1941-42

VEGETABLE PATHOLOGY, DIVISION OF, 1890-95

Beverly T. Galloway----- 1890-95

VEGETABLE PHYSIOLOGY AND PATHOLOGY, DIVISION OF, 1895-1901

Beverly T. Galloway---- 1895-1900 Albert F. Woods----- 1900-01

VETERINARY DIVISION, 1883-84

Daniel E. Salmon----- 1883-84

WAR FOOD ADMINISTRATION, 1943-45

Chester C. Davis----- 1943 Marvin Jones----- 1943-45

WEATHER BUREAU

Mark W. Harrington---- 1891-95 Willis R. Gregg----- 1934-38
Willis L. Moore----- 1895-1913 Francis W. Reichelder-
Charles F. Marvin----- 1913-34 fer ----- 1938-40

The Organization of the Agencies of the United States Department of Agriculture to March 30, 1962

The Department of Agriculture is headed by the Secretary of Agriculture who is a member of the President's Cabinet. He is assisted by the Under Secretary; four Assistant Secretaries; the Director, Agricultural Credit; and the Director, Agricultural Economics. The Agricultural Marketing Service, the Agricultural Stabilization and Conservation Service, the Commodity Credit Corporation, the Commodity Exchange Authority, and the Federal Crop Insurance Corporation report to the Assistant Secretary for Agricultural Marketing and Stabilization. The Agricultural Research Service, the Cooperative State Experiment Station Service, the Farmer Cooperative Service, the Federal Extension Service, the Forest Service, and the Soil Conservation Service report to the Assistant Secretary for Federal-State Relations. The Farmers Home Administration, the Rural Electrification Administration, and the Office of Rural Areas Development report to the Director, Agricultural Credit. The Economic Research Service, the Statistical Reporting Service, and the Management Operations Staff report to the Director, Agricultural Economics. The Foreign Agricultural Service reports to the Under Secretary. The Office of Budget and Finance, the Office of Hearing Examiners, the Office of Information, the Office of Management Appraisal and Systems Development, the National Agricultural Library, the Office of Personnel, and the Office of Plant and Operations report to the Administrative Assistant Secretary. The Office of the General Counsel reports to the Secretary.

Agricultural Marketing Service

The Administrator, reporting to the Assistant Secretary for Marketing and Stabilization, is responsible for the marketing, distribution, and related programs and activities of the Department. The Administrator is assisted by an Associate Administrator and Deputy Administrators for Marketing Research, Marketing Services, Regulatory Programs, and Management. The Service includes the following Divisions: Market Quality Research, Transportation and Facilities Research, Cotton, Dairy, Livestock, Poultry, Packers and Stockyards, Fruit and Vegetable, Grain, Tobacco, Special Services, Food Distribution, Internal Audit, Marketing Information, Administrative Services, Budget and Finance, Personnel, and three Area Administrative Divisions.

August 14, 1961.—The establishment of the positions of Associate Administrator; Deputy Administrator for Regulatory Work; Deputy Administrator, Marketing Services Programs; and Deputy Administrator for Management was announced (AMS Notice 1101, Aug. 14, 1961).

April 3, 1961.—The Secretary announced the transfer of functions from the Agricultural Marketing Service: (1) The Agricultural Economics Division, Market Development Research Division (except the Market Surveys Branch that went to the Statistical Reporting Service), Marketing Economics Research Division, and the Outlook and Situation Board, and certain functions from the Transportation and Facilities Research Division to the Economic

Research Service; (2) the Agricultural Estimates Division, the Crop Reporting Board, the Market Surveys Branch of the Market Development Research Division, and the Statistical Standards Division to the Statistical Reporting Service (Secretary's Memo. 1446, Supp. 1, Apr. 3, 1961).

February 24, 1961.—The Secretary announced his intention to realine research in agricultural economics and statistical reporting under a Director, Agricultural Economics. The functions of the Agricultural Estimates and Statistical Standards Divisions were to be transferred to the new Statistical Reporting Service. The functions of the Deputy Administrator, Economics and Statistics, and the Agricultural Economics Division; the Chairman, and Situation Outlook Board; the Market Development Research Division; and the Marketing Economics Research Division were to be transferred to the new Economic Research Service (Secretary's Memo. 1446, Feb. 24, 1961).

July 1, 1960.—The Packers and Stockyards Division was established (AMS Notice 931, June 13, 1960).

October 9, 1959.—The appointment of the Deputy Administrator, Economics and Statistics, was announced. The Market Development, Marketing Economics, Market Quality, and Transportation and Facilities Research Divisions were established, replacing the former Marketing Research Division (AMS Notice 835; USDA Press Release 2833-59, Oct. 9, 1959; Organization Chart, Sept. 11, 1959).

December 31, 1957.—The Office of Statistical Clearance had been redesignated the Statistical Standards Division (AMS Notice 647, Dec. 31, 1957; Organization Chart, Dec. 11, 1957).

April 21, 1955.—The establishment of the Special Services Division was approved (MacHenry Schafer to Oris V. Wells, Apr. 21, 1955).

November 6, 1953.—The organization of the Agricultural Marketing Service was outlined. The Administrator was assisted by Deputy Administrators for Marketing Research and Statistics and for Marketing Services, and an Assistant Administrator for Management. The following divisions were established: Marketing Services, Marketing Research, Agricultural Economics, Agricultural Estimates, Food Distribution, Cotton, Dairy, Fruit and Vegetable, Grain, Livestock, Poultry, and Tobacco (AMS Instruction 100-1, Nov. 6, 1953).

November 2, 1953.—The Agricultural Marketing Service was established, centralizing marketing and distribution functions of the Department. From the Bureau of Agricultural Economics were transferred functions not transferred to the Agricultural Research Service including those of the agricultural estimating divisions; the Farm Population and Rural Welfare, Special Surveys, Statistical and Historical Research, and Marketing and Transportation Research Division; the Crop Reporting Board; and the Situation and Outlook Boards. Marketing research and service work, the administration of marketing and regulatory legislation, work on food distribution, and food trade activities were transferred from the Production and Marketing Administration (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953).

October 13, 1953.—Secretary Benson announced his intention to establish an Agricultural Marketing Service which would "absorb a major part of the marketing, research and service functions of the Production and Marketing Administration and many of the functions of the Bureau of Agricultural Economics" (USDA Press Release 2491-53; Memo. to all employees, Oct. 13, 1953).

Agricultural Research Service

The Administrator of the Agricultural Research Service, reporting to the Assistant Secretary for Federal-States Relations, coordinates all research of the Department; directs scientific research in the fields of livestock, crops, soil and water conservation, agricultural engineering, utilization research and

development, and home economics; directs inspection, disease and pest control, and eradication work; and directs research conducted in foreign countries under grants and contracts by authority of the Agricultural Trade and Development Act.

The Administrator is assisted by an Associate Administrator; Deputy Administrators for Administrative Management, Farm Research, Nutrition and Consumer-Use Research, Regulatory and Control, Research Planning and Coordination, and Utilization Research and Development; and two Assistant Administrators. The Foreign Research and Technical Program and the Information Divisions report to the Administrator of the Agricultural Research Service. The Deputy Administrator for Administrative Management directs the work of the Administrative Services, Budget and Finance, Data Processing, Management Research and Organization, and Personnel Divisions; and Agricultural Research Center Operations. The Deputy Administrator for Farm Research directs the work of the Agricultural Engineering Research, Animal Disease and Parasite Research, Animal Husbandry Research, Crops Research, Entomology Research, and Soil and Water Conservation Research Divisions.

The Deputy Administrator for Utilization Research and Development directs the work of the Eastern, Northern, Southern, and Western Utilization Research and Development Divisions. The Deputy Administrator for Regulatory and Control directs the work of the Animal Disease Eradication, Animal Inspection and Quarantine, Meat Inspection, Pesticides Regulation, Plant Pest Control, and Plant Quarantine Divisions. The Deputy Administrator for Nutrition and Consumer-Use Research directs the work of the Clothing and Housing Research, Consumer and Food Economics Research, and Human Nutrition Research Divisions.

October 25, 1961.—The Deputy Administrator for Research Planning and Coordination was established within the Office of the Administrator (ARS Temporary Circular 61-152, Oct. 25, 1961).

October 20, 1961.—The Director, Institute of Home Economics, was redesignated as Deputy Administrator, Nutrition and Consumer-Use Research (ARS Temporary Circular 61-148, Oct. 20, 1961).

October 13, 1961.—The Associate Director, Institute of Home Economics, and the Deputy Executive Assistant Administrator were both redesignated as Assistant Administrators.

The Executive Assistant Administrator was redesignated Deputy Administrator, Administrative Management (ARS Temporary Circular 61-148, Oct. 20, 1961).

June 11, 1958.—The Deputy Administrator, Production Research, was redesignated Deputy Administrator, Farm Research (ARS Administrative Memo. 102.1, June 11, 1958).

February 21, 1957.—The work of the Service was reorganized under Deputy Administrators: Experiment Stations, Production Research, Regulatory Programs, and Utilization Research and Development; the Director, Institute of Home Economics; and the Executive Assistant Administrator. Organizational units previously designated branches were redesignated as divisions (ARS Administrative Memo. 101.1, Feb. 21, 1957).

November 2, 1955.—The Assistant Administrator, Office of Experiment Stations, was redesignated Deputy Administrator, Experiment Stations (Secretary's Memo. to directors of experiment stations, Nov. 2, 1955).

January 2, 1954.—The Administrator of the Agricultural Research Service announced that the work of the Service was organized under an Assistant Administrator, Office of Experiment Stations; Assistant Administrator, Management; Deputy Administrator, Research, assisted by Directors for Crops Research, Livestock Research, Farm and Land Management Research, Human Nutrition and Home Economics Research, and Utilization Research; and Deputy Administrator, Regulatory Programs, assisted by Directors for Crops and Livestock Regulatory Programs (ARS Administrative Memo. 101.1, Dec. 28, 1953).

November 2, 1953.—The Agricultural Research Service was established

and assigned the following functions: Research on farm management and costs (including local farm labor studies), land economics, and agricultural finance, from the Bureau of Agricultural Economics; all soil conservation research except investigations required for the national soil survey, from Soil Conservation Service; all range management research (except that on forest ranges and adequate integrated nonforest lands), and all research on grass and the control of undesirable plants, from the Forest Service; cotton ginning and processing research on improved ginning technology and associated processes involved in the preparation of cotton fiber and cottonseed for market, from the Production and Marketing Administration; the administration of the Insecticide, Fungicide, and Rodenticide Act, from the Production and Marketing Administration; virtually all functions previously assigned to the Agricultural Research Administration (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953).

DEPUTY ADMINISTRATOR, EXPERIMENT STATIONS

November 2, 1961.—The functions of the Territorial Stations Division, formerly assigned to the supervision of the Deputy Administrator, Experiment Stations, were transferred to the Crops Research Division under the supervision of the Deputy Administrator, Farm Research (ARS Temporary Circular 61-156, Nov. 3, 1961).

September 1, 1961.—The functions of the State Experiment Stations Division were transferred to the Cooperative State Experiment Station Service (Secretary's Memo. 1462, Supp. 1, Aug. 30, 1961).

November 2, 1955.—The position of Deputy Administrator, Experiment Stations, replaced that of Assistant Administrator, Office of Experiment Stations (Secretary's Memo. to the directors of experiment stations, Nov. 2, 1955).

January 2, 1954.—The position of the Chief of the Office of Experiment Stations as Assistant Administrator, Agricultural Research Administration, was redesignated as Assistant Administrator, Office of Experiment Stations (ARS Administrative Memo. 101.1, Dec. 28, 1953).

April 15, 1947.—The Chief of the Office of Experiment Stations was appointed also as Assistant Administrator, Agricultural Research Administration (USDA Press Release 798-47, Apr. 15, 1947).

February 23, 1942.—The duties of the Director of Research, previously assigned to the Chief of the Office of Experiment Stations, were assumed by the Administrator of the Agricultural Research Administration after its establishment in the general reorganization of the Department (Secretary's Memos. 986 and 987, Feb. 25, 1942).

February 23, 1942.—The Office of Experiment Stations became one of the constituent parts of the Agricultural Research Administration (Executive Order 9069, Feb. 23, 1942).

December 15, 1941.—As a first step in the reorganization of the Department, the Secretary grouped the Office of Experiment Stations with the scientific bureaus under an Agricultural Research Administrator (Secretary's Memo. 960, Dec. 13, 1941).

March 16, 1936.—The Chief of the Office of Experiment Stations was designated as Director of Research (Secretary's Memo. 689, Mar. 16, 1936).

July 1, 1923.—Pursuant to the provisions of the Agricultural Appropriation Act for the fiscal year 1924, the States Relations Service was abolished, the Office of Experiment Stations was transferred to the Office of the Director of Scientific Work, and the Chief of the Office of Experiment Stations was designated as Assistant Director of Scientific Work (42 Stat. 1289; Secretary's Memo. 436, June 8, 1923; Secretary's Memo. 440, June 20, 1923).

July 1, 1915.—Pursuant to the provisions of the Agricultural Appropriations Act providing for the establishment of the States Relations Service, the Secretary transferred the Office of Experiment Stations to the new agency (38 Stat. 1108; Secretary's Memo. 140, June 8, 1915).

October 1, 1888.—The Office of Experiment Stations was established.

DEPUTY ADMINISTRATOR, FARM RESEARCH

The Deputy Administrator directs the work of the following Divisions: Soil and Water Conservation Research, Crops Research, Animal Disease and Parasite Research, Entomology Research, Agricultural Engineering Research, and Animal Husbandry Research.

April 3, 1961.—The Farm Economics Research Division was transferred to the Economic Research Service, where it was redesignated as the Farm Economics Division (Secretary's Memo. 1446, Supp. 1, Apr. 3, 1961; ERS General Memo. 2, June 6, 1961).

June 11, 1958.—The Deputy Administrator, Production Research, was redesignated Deputy Administrator, Farm Research (ARS Administrative Memo. 102.1, June 11, 1958).

DEPUTY ADMINISTRATOR, NUTRITION AND CONSUMER-USE RESEARCH

October 20, 1961.—The Director, Institute of Home Economics, was redesignated as Deputy Administrator, Nutrition and Consumer-Use Research (ARS Temporary Circular 61-148, Oct. 20, 1961).

October 13, 1961.—The Household Economics Research Division was redesignated the Consumer and Food Economics Research Division (Organization Chart, Oct. 13, 1961).

February 21, 1957.—The Institute of Home Economics was established in connection with the general reorganization of the Agricultural Research Service and its Director took over the functions formerly assigned to the Director of Home Economics Research (ARS Administrative Memo. 101.1, Feb. 21, 1957).

September 13, 1955.—The Director, Human Nutrition Research and Home Economics, was redesignated Director, Home Economics Research; and the work was reorganized and assigned to the Clothing and Housing, the Household Economics, and the Human Nutrition Research Divisions (ARS Administrative Memo. 101.1, Supp. 29, Sept. 14, 1955).

January 2, 1954.—Under the general reorganization of the functions of the Agricultural Research Service, the direction of home economics and human nutrition work was assigned to the Director, Human Nutrition and Home Economics Research. The work was internally assigned to the Human Nutrition Research Branch and the Home Economics Research Branch (ARS Administrative Memo. 101.1, Dec. 28, 1953).

DEPUTY ADMINISTRATOR, PRODUCTION RESEARCH

June 11, 1958.—The Deputy Administrator, Production Research, was redesignated Deputy Administrator, Farm Research (ARS Administrative Memo. 102.1, June 11, 1958).

February 21, 1957.—The position of Deputy Administrator, Production Research, was established, realining work under the Directors of Crops, Livestock, and Farm and Land Management Research formerly under the Deputy Administrator, Research. At the same time, the branches were redesignated as divisions. The Dairy Husbandry Research Branch was combined with the Animal and Poultry Research Branch to form the Animal Husbandry Research Division. The Production Economics Research Branch was redesignated the Farm Economics Research Division. The Field Crops Research Branch and the Horticultural Crops Research Branch were combined into the Crops Research Division. All other divisions retained their former functions (ARS Administrative Memo. 101.1, Feb. 21, 1957).

DEPUTY ADMINISTRATOR, REGULATORY AND CONTROL

November 17, 1961.—The Pesticides Regulation Division was established to administer the Insecticide, Fungicide, and Rodenticide Act of 1947 and Public

Law 518 formerly administered by the Pesticides Regulation Branch of the Plant Pest Control Division (ARS Temporary Circular 61-162, Nov. 22, 1961).

February 21, 1957.—The former branches were redesignated as divisions reporting directly to the Deputy Administrator, Regulatory Programs (ARS Administrative Memo. 101.1, Feb. 21, 1957).

January 2, 1954.—The Deputy Administrator, Regulatory Work, was directed to coordinate regulatory work with the assistance of Directors of Crops Regulatory Programs, and Livestock Regulatory Programs (ARS Administrative Memo. 101.1, Dec. 28, 1953).

The Director, Crops Regulatory Programs, supervised the work of the Plant Quarantine and Plant Pest Control Branches with regulatory functions formerly assigned to the Bureau of Entomology and Plant Quarantine.

The Director, Livestock Regulatory Programs, supervised the work of the Meat Inspection Branch with functions of the Meat Inspection Division of the former Bureau of Animal Industry and the processed butter inspection work of the former Bureau of Dairy Industry; the Animal Disease Eradication Branch with regulatory functions formerly assigned to the Interstate Inspection, Vesicular Exanthema Eradication, Brucellosis and Tuberculosis Eradication, and the Virus Serum Control Divisions of the Bureau of Animal Industry; and the Animal Quarantine Branch (later referred to as the Animal Inspection and Quarantine Branch) with functions formerly assigned to the Animal Inspection and Quarantine and the Interstate Inspection Divisions of the Bureau of Animal Industry.

DEPUTY ADMINISTRATOR, RESEARCH

February 21, 1957.—The work formerly delegated to the Deputy Administrator, Research, was redelegated to the new Deputy Administrator, Production Research, the Deputy Administrator, Utilization Research, and the Director, Institute of Home Economics (ARS Administrative Memo. 101.1, Feb. 21, 1957).

January 2, 1954.—The Deputy Administrator, Research, was directed to coordinate the work of directors supervising research on crops, farm and land management, livestock, human nutrition and home economics, and utilization of agricultural commodities (ARS Administrative Memo. 101.1, Dec. 28, 1953).

The Director, Crops Research, was responsible for the work of the Field Crops Research Branch with functions formerly assigned to the Director, Field Crops Research, of the Bureau of Plant Industry, Soils, and Agricultural Engineering; the Horticultural Crops Research Branch, formerly under the Director, Horticultural Crops Research, of the same Bureau; the Entomology Research Branch with nonregulatory activities of the former Bureau of Entomology and Plant Quarantine.

The Director, Farm and Land Management Research, was responsible for the work of the Agricultural Engineering Research Branch with functions formerly supervised by the Director, Agricultural Engineering Research, of the Bureau of Plant Industry, Soils, and Agricultural Engineering; the Soil and Water Conservation Research Branch with functions formerly supervised by the Director, Soils Research, of the same Bureau, soil and water research transferred from the Soil Conservation Service, and range management research transferred from the Forest Service; the Production Economics Branch with functions transferred from the former Bureau of Agricultural Economics—the Land and Water Section assumed functions formerly performed by the Division of Land Economics; the Farming Efficiency Section, part of the functions of the former Division of Farm Management and Costs and the farm labor supply, requirements, and distribution work of the Division of Farm Population and Rural Welfare; the Agricultural Finance Section, the functions of the Agricultural Finance Division; the Production, Income, and Costs Section, part of the functions of the Division of Farm Management and Costs; and the Northern, Southern, and Western Field Research Sections

were established by the transfer of functions of the field staff of the Divisions of Land Economics and Farm Management and Costs with a coordinating staff in Washington.

The Director, Livestock Research, was responsible for the work of the Animal and Parasite Research Branch with functions consisting primarily of those of the former Pathological and Zoological Divisions of the Bureau of Animal Industry; Dairy Husbandry Research Branch with nonregulatory functions of the former Bureau of Dairy Industry; and the Animal and Poultry Husbandry Research Branch with functions of the former Animal Husbandry Division and other nonregulatory functions of the Bureau of Animal Industry.

The organization of the utilization and home economics and human nutrition research remained virtually unchanged following the reorganization of 1953 and is described elsewhere.

DEPUTY ADMINISTRATOR, UTILIZATION RESEARCH AND DEVELOPMENT

The Deputy Administrator is responsible for the administration of a broad program of research in the physical and biological sciences and engineering development to discover new, wider, and more effective utilization of agricultural products and byproducts. The work is divided among four regional divisions: Eastern, Northern, Southern, and Western.

February 21, 1957.—As part of a reorganization of the Agricultural Research Service, the position of Director, Utilization Research, formerly under the Deputy Administrator, Research, was redesignated as Deputy Administrator, Utilization Research, and the branches were renamed divisions (ARS Administrative Memo. 101.1, Feb. 21, 1957).

January 29, 1955.—The Washington Utilization Branch was abolished and its functions were transferred to the Eastern Utilization Branch (ARS Administrative Memo. 101.1, Supp. 23, Jan. 26, 1955).

January 2, 1954.—Utilization research was placed under the Deputy Administrator of Research and the Director, Utilization Research. The work was organized under regional branches—Washington, Eastern, Northern, Southern, and Western. It included that formerly performed by the Bureau of Agricultural and Industrial Chemistry, utilization research in other bureaus of the Agricultural Research Administration, and research in cotton ginning and processing conducted by the Production and Marketing Administration.

AGRICULTURAL RESEARCH ADMINISTRATION

January 21, 1953.—The Agricultural Research Administration was designated a part of the Research, Extension, and Land Use Group in the general regrouping of functions of the Department (Secretary's Memo. 1320, Jan. 21, 1953).

May 15, 1951.—The responsibility for agricultural research under the Defense Production Act of 1950 was assigned to the Agricultural Research Administrator (Secretary's Memo. 1279, Supp. 1, May 15, 1951).

February 26, 1951.—To implement the National Manpower Mobilization Policy, the Agricultural Research Administration was assigned responsibility for arranging for appropriate bureaus to prosecute research in laborsaving machinery, facilities and practices, basic to further increasing per man-hour output in the production, processing, and marketing of agricultural commodities; and for encouraging similar research by State agricultural experiment stations (Secretary's Memo. 1283, Feb. 26, 1951).

July 30, 1949.—The administration of the Research and Marketing Act was transferred from the Office of the Administrator, Research and Marketing Act, to the Administrator, Agricultural Research Administration (Secretary's Memo. 1237, July 29, 1949).

September 15, 1947.—An Assistant Administrator was appointed to coordinate research on utilization and marketing, which had been expanded

under the Research and Marketing Act of 1946, and to assist the Chief of the Office of Experiment Stations in research under the act (USDA Press Release 2133-47, Sept. 18, 1947).

July 18, 1947.—An Administrator of the Research and Marketing Act was appointed to coordinate, oversee, and develop marketing policies and activities of the Department; and to integrate research, education, and production programs in their relation to market activities; and to maintain relations with State and other institutions cooperating in marketing, regulatory, and service programs (Secretary's Memo. 1199, July 18, 1947).

April 15, 1947.—The Chief of the Office of Experiment Stations was appointed as Assistant Administrator, Agricultural Research Administration (USDA Press Release 798-47, Apr. 15, 1947).

March 19, 1947.—The Administrator of the Agricultural Research Administration was authorized and directed to coordinate all research of the Department, other than economic (Secretary's Memo. 1187, Mar. 19, 1947).

December 27, 1946.—An Administrator of the Research and Marketing Act was appointed as a staff officer to assist the Secretary in developing overall plans for work to be carried out by the Department under the act (Secretary's Memo. 1182, Dec. 27, 1946).

February 23, 1942.—The Agricultural Research Administration was established by Executive Order 9069 which reorganized much of the work of the Department by the consolidation of the activities of the Bureaus of Animal Industry, Dairy Industry, Plant Industry, Agricultural Chemistry and Engineering, Entomology and Plant Quarantine, and Home Economics; the Office of Experiment Stations; and the Beltsville Research Center (See also Secretary's Memos. 986 and 987, Feb. 25, 1942). Duties of the Director of Research, previously assigned to the Chief of the Office of Experiment Stations, were assumed by the Agricultural Research Administrator. These bureaus had previously been grouped under an Agricultural Research Administrator by Secretary's Memorandum 960, effective December 15, 1941.

COORDINATION OF SCIENTIFIC WORK PRIOR TO THE APPOINTMENT OF THE AGRICULTURAL RESEARCH ADMINISTRATOR

March 16, 1936.—The Chief of the Office of Experiment Stations was designated as Director of Research (Secretary's Memo. 689, Mar. 16, 1936).

June 30, 1934.—The position of the Director of Scientific Work was abolished (USDA Press Release 3021-34, June 30, 1934).

October 1, 1921.—The position of Director of Scientific Work was established to advise the Secretary and bureau chiefs and to coordinate and correlate scientific work (Secretary's Memo. 351, Sept. 29, 1921).

March 23, 1897.—A Special Agent in charge of Scientific and Statistical Investigations was appointed to supervise certain scientific divisions and offices and the Section of Foreign Markets which had formerly reported directly to the Secretary. On September 30, 1897, the Secretary terminated the position (Secretary's Orders, Mar. 23 and Sept. 30, 1897).

1895.—The Division of Microscopy, established in 1871 to centralize microscopic work of the Department, was abolished and its functions transferred to other divisions.

March 23, 1889.—An Assistant Secretary was appointed and assigned responsibility for coordinating the scientific work of the Department (25 Stat. 659).

AGRICULTURAL RESEARCH CENTER

November 2, 1953.—The Agricultural Research Center became a part of the Agricultural Research Service (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953).

July 11, 1945.—The Beltsville Research Center was redesignated the Agricultural Research Center (Secretary's Memo. 681, Supp. 2, July 11, 1945).

December 15, 1941.—The Beltsville Research Center was placed under the supervision of the Agricultural Research Administrator (Secretary's Memo. 960, Dec. 13, 1941).

1941.—The activities of the Arlington Experimental Farm were transferred to the Beltsville Research Center.

December 9, 1939.—The National Agricultural Research Center was redesignated Beltsville Research Center (Secretary's Memo. 681, Supp. 1, Dec. 9, 1939).

During the fiscal year 1936, the activities of the Animal Disease Station, Bethesda, Md., established in 1897, were transferred to Beltsville, Md.

December 10, 1935.—The Beltsville Research Center was redesignated the National Agricultural Research Center (Secretary's Memo. 681, Dec. 10, 1935).

August 28, 1934.—The activities of the Department in the Beltsville area were consolidated administratively under the Director of the Beltsville Research Center (Secretary's Memo. 648, Aug. 28, 1934).

1910.—475 acres of land were purchased at Beltsville to supplement the facilities in Bethesda (authorized by 35 Stat. 1039).

April 18, 1900.—About 400 acres at Arlington, Va., were transferred from the War Department to the Department of Agriculture for use as an experimental farm (31 Stat. 135).

BUREAU OF AGRICULTURAL AND INDUSTRIAL CHEMISTRY

November 2, 1953.—The functions of the Bureau of Agricultural and Industrial Chemistry were transferred to the Agricultural Research Service (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953). These were assigned, January 2, 1954, to the Director, Utilization Research (ARS Administrative Memo. 101.1, Dec. 28, 1953).

June 10, 1952.—The Division of Biologically Active Compounds was transferred to the Eastern Regional Research Laboratory (G. E. Hilbert to the Assistant Secretary, May 29, 1952).

November 22, 1950.—The Agricultural Chemical Research Division was abolished (Memo. from Acting Director of Personnel to P. V. Cardon, Nov. 22, 1950).

October 1, 1950.—The employees and work of the Microbiology Division were transferred to the Western Regional Laboratory (Henry Donovan, Assistant Chief, BAIC, to M. J. Copley, Director, Western Regional Laboratory, Aug. 31, 1950).

November 19, 1948.—The directors of the regional research laboratories were made responsible for all activities of the Bureau within their respective regions (BAIC Memo. 409, Nov. 19, 1948).

October 13, 1948.—The reorganization of the Enzyme and Phytochemical Research Division and its redesignation as the Enzyme Research Division was approved (L. B. Howard to P. V. Cardon, Oct. 13, 1948).

1944.—The Biologically Active Chemical Compounds Division was established.

March 17, 1943.—The Chief of the Bureau of Agricultural and Industrial Chemistry announced plans for the transfer of the Agricultural Chemical Research, the Naval Stores Research, and the Enzyme Research Divisions to the Regional Research Laboratories (BAIC Memo. 367, Mar. 17, 1943). Later the functions were realigned in the Agricultural Chemical Research, the Microbiology Research, and the Enzyme and Phytochemical Research Divisions.

February 13, 1943.—The Bureau of Agricultural and Industrial Chemistry was established pursuant to Executive Order 9069 to include the four regional research laboratories and those divisions of the former Bureau of Agricultural Chemistry and Engineering not transferred to the Bureau of Human Nutrition and Home Economics or to the Bureau of Plant Industry, Soils, and Agricultural Engineering (ARA Memo. 5, Feb. 13, 1943).

Its work as reorganized concerned the chemical and technological problems relating to the utilization of agricultural commodities and was organized in the following divisions: Agricultural Chemical Research; Naval Stores Research; Allergens Research; Biologically Active Compounds; Enzyme Research; and Eastern, Northern, Southern, and Western Regional Laboratories.

BUREAU OF AGRICULTURAL CHEMISTRY AND ENGINEERING

February 13, 1943.—The Bureau of Agricultural Chemistry and Engineering was abolished pursuant to Executive Order 9069. The Protein and Nutrition Research Division was transferred to the redesignated Bureau of Human Nutrition and Home Economics; the agricultural engineering divisions in general and the Effluent Contaminants and Chemical Weed Eradication Section of the Division of Agricultural Chemical Research were transferred to the new Bureau of Plant Industry, Soils, and Agricultural Engineering; the four regional laboratories and remaining activities of the Bureau were consolidated in the Bureau of Agricultural and Industrial Chemistry (ARA Memo. 5, Feb. 13, 1943). Prior to this reorganization, the Bureau of Agricultural Chemistry and Engineering consisted of the following divisions: Agricultural Chemical Research, Mechanical Processing of Farm Products Research, Naval Stores Research, Allergen Research, Farm Mechanical Equipment Research, Protein and Nutrition Research, Enzyme Research, and Rural Electrification Research.

February 23, 1942.—By Executive Order 9069, the Bureau of Agricultural Chemistry and Engineering became a part of the Agricultural Research Administration.

December 1, 1939.—The Fertilizer Research Division was placed under the supervision of the Bureau of Plant Industry and was formally transferred to that Bureau on July 1, 1940.

October 16, 1938.—The Bureau of Agricultural Chemistry and Engineering was established by the combining of the agricultural chemical research of the former Bureau of Chemistry and Soils with agricultural engineering research other than on drainage and irrigation of the former Bureau of Agricultural Engineering and was authorized and directed to administer the four regional research laboratories established pursuant to provisions of the Agricultural Adjustment Act of 1938. It was composed of the following organizational divisions: Carbohydrate Research; Fertilizer Research; Food Research; Industrial Farm Products Research; Protein and Nutrition Research; Naval Stores Research; Chemical Investigation of Allergens in Agricultural Products; Chemical Engineering Research; Mechanical Farm Equipment Research; Farm Structures Research; Farm Operating Efficiency Research; Rural Electrification Research; Mechanical Processing of Farm Products; Engineering Plans and Service; and the Eastern, Northern, Southern, and Western Regional Research Laboratories.

BUREAU OF AGRICULTURAL ENGINEERING

October 16, 1938.—The Bureau of Agricultural Engineering was abolished in connection with the reorganization of much of the work of the Department. Research in agricultural engineering, other than drainage and irrigation investigations, was transferred to the Bureau of Agricultural Chemistry and Engineering. The drainage and irrigation investigations were transferred to the Bureau of Plant Industry (Secretary's Memo. 789, Oct. 6, 1938). Prior to the reorganization of 1938, the Bureau consisted of a number of laboratories and the following divisions: Farm Structures, Drainage, Irrigation, Mechanical Equipment, and Plans and Services.

July 1, 1931.—The Division of Agricultural Engineering of the Bureau of Public Roads became the Bureau of Agricultural Engineering (Secretary's Memo. 617, June 1, 1931). This Division had been established in 1921 as the

successor to the Divisions of Drainage Investigations, Irrigation Investigations, and Rural Engineering.

BUREAU OF ANIMAL INDUSTRY

November 2, 1953.—The Bureau of Animal Industry was abolished and its functions transferred to the Agricultural Research Service (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953). Later its functions were assigned to the Director, Livestock Research, and the Director, Regulatory Programs (ARS Administrative Memo. 101.1, Dec. 28, 1953). Prior to its abolition, the Bureau consisted of the following divisions: Animal Husbandry, Pathological, Zoological, Meat Inspection, Animal Foods Inspection, Inspection and Quarantine, Virus-Serum Control, Brucellosis and Tuberculosis Eradication, and Interstate Inspection.

July 14, 1950.—The Tuberculosis Eradication Division was redesignated the Brucellosis and Tuberculosis Eradication Division (BAI Circular Letter 110.1, July 14, 1950).

April 22, 1947.—The establishment of the Interstate Inspection and the Inspection and Quarantine Divisions was approved. The former represented a consolidation of functions of the former Interstate Inspection Division and the Field Inspection Division relating to animal disease control and eradication, and the work transferred from the Production and Marketing Administration relative to administration of the 28-Hour Law. The Inspection and Quarantine Division was to have jurisdiction of other functions of the former Field Inspection Division and functional responsibility for the Bureau in foreign disease control and eradication programs (N. R. Bear to W. V. Lambert, Apr. 22, 1947).

November 20, 1946.—The Animal Foods Inspection Division was created to inspect, certify, and identify canned food for cats, dogs, foxes, and other meat-eating animals (BAI, *Annual Report*, 1947, p. 68).

October 1, 1946.—Enforcement of the Meat Inspection Act, the 28-Hour Law, and related administrative functions were transferred from the Production and Marketing Administration to the Bureau of Animal Industry by Secretary's Memorandum 1172, August 21, 1946, and were continued by the Meat Inspection Division and the Interstate Inspection Division, respectively (BAI, *Annual Report*, 1947, pp. 2-3).

August 30, 1943.—The Divisions of Interstate Inspection and Tick Eradication and Special Diseases were merged administratively and continued as the Interstate Inspection Division (T. Roy Reid to E. C. Auchter, Sept. 1, 1943).

December 5, 1942.—In accordance with Executive Order 9280, the enforcement of the Meat Inspection Act, the 28-Hour Law, and related activities were transferred from the Bureau of Animal Industry to the Food Distribution Administration (Secretary's Memo. 1054, Supp. 3, Feb. 4, 1943).

June 23, 1942.—The Animal Nutrition Division and the Animal Husbandry Division were combined and designated the Division of Animal Husbandry (J. R. Mohler to E. C. Auchter, June 19, 1942).

June 13, 1940.—The Biochemic Division was abolished and its functions were divided between the Pathological and the Animal Nutrition Divisions (Roy F. Hendrickson to J. R. Mohler, June 13, 1940).

October 16, 1938.—After the transfer of the enforcement of the Packers and Stockyards Act to the new marketing and regulatory agency, other functions of the former Packers and Stockyards Division relating to interstate transportation of livestock and the administration of livestock transportation and quarantine laws were continued by the newly established Interstate Inspection Division (Secretary's Memo. 783, Oct. 6, 1938; BAI, *Annual Report*, 1939, p. 44).

May 1, 1936.—The Division of Animal Nutrition was established to study problems of feeding and nutrition in livestock (BAI, *Annual Report*, 1936, p. 3).

June 1, 1934.—The Division of Tick Eradication and Special Diseases was

formed by the consolidation of the Tick Eradication Division with the Division of Hog Cholera Control (BAI, *Annual Report*, 1934, p. 39).

July 1, 1927.—The Packers and Stockyards Administration was abolished as an independent agency and the work was transferred to the Bureau of Animal Industry where the Packers and Stockyard Division was established (Secretary's Memo. 573, June 20, 1927).

July 1, 1924.—The Dairy Division was removed from the Bureau of Animal Industry and established as a separate bureau, the Bureau of Dairying.

May 1, 1922.—The Quarantine Division was merged in the Field Inspection Division (J. R. Mohler to Henry C. Wallace, Apr. 1, 1922).

July 1, 1920.—The Office of Virus Serum Control, established February 17, 1917, was given divisional status.

April 16, 1919.—The Division of Hog Cholera Control was established to replace the Office of Hog Cholera Control established by January 1, 1916 (H. F. Fitz to J. R. Mohler, Apr. 17, 1919).

May 1, 1917.—The Tick Eradication Division was established (Memo. to Chiefs of Divisions and Offices, BAI, May 2, 1917).

May 1, 1917.—The Tuberculosis Eradication Division was established (Memo. to Chiefs of Divisions and Offices, BAI, May 2, 1917).

September 1, 1912.—The Inspection Division was divided into the Meat Inspection Division and the Field Inspection Division.

January 1, 1910.—The Animal Husbandry Office was redesignated by a special order of the Secretary, dated December 30, 1909, as the Animal Husbandry Division.

July 1, 1903.—The Miscellaneous Division was reorganized and redesignated the Quarantine Division.

1901.—The Zoological Laboratory, established August 1, 1886, became the Zoological Division.

July 1, 1896.—The Quarantine Division became a part of the Miscellaneous Division.

April 25, 1896.—The status of the Pathological Division was recognized in the annual appropriation act (29 Stat. 101).

April 25, 1896.—The Biochemic Division, established as the Biochemic Laboratory on January 1, 1890, was so designated in the annual appropriation act (29 Stat. 101).

July 1, 1895.—The Dairy Division was established in the Bureau of Animal Industry by an order of the Secretary, April 16, 1895.

April 1, 1891.—Following the passage of the Meat Inspection Act, the work of the Bureau was expanded and reorganized. An order of the Secretary established the following divisions: Animal Pathology; Field Investigations; Quarantine; and Inspection.

May 29, 1884.—The Veterinary Division became the Bureau of Animal Industry in accordance with an act of Congress (23 Stat. 31).

1883.—The Veterinary Division was established (Commissioner of Agriculture, *Annual Report*, 1883, p. 11).

BUREAU OF CHEMISTRY

July 1, 1927.—As a part of a reorganization of much of the scientific and regulatory work of the Department, the work formerly performed by the Bureau of Chemistry was realigned. Regulatory work relating to the Food and Drugs Act, the Tea Inspection Act, and the Naval Stores Act, which had formerly been administered by the Bureau of Chemistry and the Insecticide and Fungicide Board, was consolidated in the new Food, Drug, and Insecticide Administration. At this time the Insecticide and Fungicide Board, established on December 22, 1910, by General Order 143, was abolished (Secretary's Memo. 569, May 17, 1927). Other research work of the Bureau of Chemistry was combined with that of the Bureau of Soils and soils work performed by the Bureau of Plant Industry in the new Bureau of Chemistry and Soils (44 Stat. 991).

April 24, 1914.—The Board of Food and Drug Inspection, established by General Order 111, April 25, 1907, to consider all questions concerning the enforcement of the Food and Drug Act, was abolished and its functions divided between the Bureau of Chemistry and the Office of the Solicitor (Secretary's Memo. 87, Apr. 24, 1917).

July 1, 1908.—The Miscellaneous Laboratory, formerly the Insecticide and Agricultural Water Laboratory, was redesignated the Miscellaneous Division (Secretary's Special Order, June 23, 1908).

January 1, 1908.—The Drug Laboratory was redesignated the Division of Drugs (Secretary's Special Order, Dec. 26, 1907).

July 1, 1905.—The Division of Tests was transferred to the Office of Public Roads (Bureau of Chemistry, *Annual Report*, 1905, p. 505).

July 1, 1904.—The Road Materials Laboratory, established October 10, 1900, by General Order 32, was redesignated the Division of Tests (Secretary's Special Order, June 2, 1904).

July 1, 1904.—The Division of Foods was established (Secretary's Special Order, June 3, 1904).

July 1, 1901.—The Division of Chemistry, established in 1862 (31 Stat. 930), became the Bureau of Chemistry.

BUREAU OF CHEMISTRY AND SOILS

October 16, 1938.—The Bureau of Chemistry and Soils was abolished. To the Bureau of Plant Industry was transferred the work of the Division of Soil Chemistry and Physics, the Division of Soil Survey, and the unit conducting research on plant mineral constituents derived from soils. To the new Bureau of Agricultural Chemistry and Engineering was transferred the chemical research work (Secretary's Memo. 784, Oct. 6, 1938).

During the fiscal year 1938, the Division of Chemical Investigation of Allergens in Agricultural Products was established.

July 1, 1935.—The broad subject grouping of the Divisions of the Bureau of Chemistry and Soils was discontinued, with the work assigned to the following divisions: Soil Survey; Soil Chemistry and Physics Research; Naval Stores, established by separation from the Industrial Farm Products Division; Industrial Farm Products Research, established by combining the remaining work of the Industrial Farm Products Division with the Color and Farm Waste Division; Carbohydrates Research, enlarged by the inclusion of the Oil, Fats, and Wax Laboratory; Chemical Engineering Research; Fertilizer Research; Food Research; and Protein and Nutrition Research.

September 1, 1934.—The Divisions of Soil Fertility and Soil Microbiology were transferred from the Bureau of Chemistry and Soils to the Bureau of Plant Industry.

July 1, 1927.—The Bureau of Chemistry and Soils was established by the merging of the research work of the Bureau of Chemistry with that of the Bureau of Soils and with the Division of Soil Fertility and the Division of Soil Biology of the Bureau of Plant Industry (44 Stat. 976, 991, 1002). The work of the new bureau was grouped under broad areas of research and thereunder by division. Chemical and Technological Research: Carbohydrates; Plant Dust Explosion and Farm Fire; Color and Farm Waste; Crop Chemistry; Food Research; Insecticide and Fungicide; Oil, Fat, and Wax; Protein and Nutrition; and Industrial Farm Products. Soils Investigations: Soil Survey; Soil Chemistry and Physics; Soil Fertility; and Soil Microbiology. Fertilizer and Fixed Nitrogen Investigations: Biochemical and Organic Nitrogen; Chemical Engineering; Transformation of Nitrogen Compounds; Concentrated Fertilizer; Mechanical Engineering; Physics; Gas Constants and Chemical Analysis; Phosphates; Potash; and Mechanism of Catalysis.

BUREAU OF DAIRY INDUSTRY

November 2, 1953.—The functions of the Bureau of Dairy Industry were assigned to the Agricultural Research Service (Secretary's Memo. 1320, Supp.

4, Nov. 2, 1953). On January 2, 1954, the nonregulatory functions of the former Bureau of Dairy Industry were assigned to the Dairy Husbandry Research Branch and the regulatory to the Meat Inspection Branch (ARS Administrative Memo. 101.1, Dec. 28, 1953).

November 1, 1953.—The Bureau of Dairy Industry was composed of the following divisions: Dairy Herd Improvement Investigations; Dairy Cattle Breeding, Feeding, and Management; Nutrition and Physiology; and Dairy Products Research Laboratories.

February 21, 1944.—The consolidation of the Division of Market Milk Investigations with the Division of Dairy Research Laboratories was approved (T. Roy Reid to E. C. Auchter, Feb. 21, 1944).

February 23, 1942.—The Bureau of Dairy Industry became a part of the Agricultural Research Administration (Executive Order 9069, Feb. 23, 1942).

November 4, 1936.—The establishment of the Division of Physiology and Nutrition was approved.

October 1, 1935.—The Division of Dairy Manufacturing Investigations and Introduction was abolished and its activities were transferred to the Division of Dairy Research Laboratories (BDI Memo. 6, Sept. 30, 1935).

May 1, 1929.—The Bureau of Dairy Industry was reorganized, and its work, formerly organized by project, was realigned by Bureau of Dairy Industry Memorandum, April 23, 1929, in the following divisions: Dairy Cattle Breeding, Feeding, and Management Investigations; Market Milk Investigations; Dairy Herd Improvement Investigations; Dairy Manufacturing Investigations and Introduction.

July 1, 1926.—The Bureau of Dairying was redesignated the Bureau of Dairy Industry (44 Stat. 507).

July 1, 1924.—The Dairy Division, created in the Bureau of Animal Industry, July 1, 1895 (Secretary's Order, Apr. 16, 1895), became the Bureau of Dairying (43 Stat. 243).

BUREAU OF ENTOMOLOGY

July 1, 1934.—The Bureau of Entomology was combined with the Bureau of Plant Quarantine to form the Bureau of Entomology and Plant Quarantine. Prior to the merger, the Bureau of Entomology was composed of the following divisions: Cereal and Forage Insect, Plant Disease Eradication, Insects Affecting Man and Animals, Japanese and Asiatic Beetle Investigations, Bee Culture, Cotton Insects, Forest Insects, Truck Crop and Garden Insects, and Fruit and Shade Tree Investigations.

December 1, 1933.—Plant disease eradication and control functions of the Bureau of Plant Industry were assigned to the Chief of the Bureau of Entomology, who established the Plant Disease Eradication Division.

July 1, 1904.—The Division of Entomology, established in 1863, became the Bureau of Entomology (33 Stat. 289).

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

November 2, 1953.—The Bureau of Entomology and Plant Quarantine was abolished and its functions transferred to the Agricultural Research Service (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953). Later, the functions were assigned to the Director, Crops Research, and Director, Crops Regulatory Programs (ARS Memo. 101.1, Dec. 28, 1953). Prior to the abolition of the Bureau it was composed of the following divisions: Bee Culture and Biological Control, Cereal and Forage Insect Investigations, Insects Affecting Cotton and Other Fiber Plants, Forest Insect Investigations, Fruit Insect Investigations, Insect Detection and Identification, Insect Investigations, Insects Affecting Man and Animals, Plant Quarantines, Stored Product Insect Investigations, and Truck Crop and Garden Insect Investigations.

January 19, 1953.—The Division of Insects Affecting Cotton and Other Fiber Plants was established and the Division of Cotton Insect Investigations was abolished (T. Roy Reid to Avery S. Hoyt, Jan. 19, 1953).

September 12, 1952.—The Division of Insecticide Investigations was established to include functions not transferred from the Control Division to the Stored Products Investigations (N.R. Bear to Avery S. Hoyt, Sept. 12, 1952).

April 18, 1952.—The Division of Foreign Plant Quarantine was redesignated the Division of Plant Quarantine (W. F. Leffler to T. Roy Reid, Apr. 18, 1952).

April 2, 1952.—The Division of Bee Culture and Biological Control was established by combining the Divisions of Bee Culture and Foreign Parasite Investigations and some functions from the Divisions of Fruit Insects and Forest Insect Investigations (N. R. Bear to Avery S. Hoyt, Apr. 2, 1952).

March 12, 1952.—The Division of Insect Identification and Detection was created with the addition of duties to those of the Division of Insect Identification (James Buckley to Avery S. Hoyt, Mar. 12, 1952).

February 11, 1952.—The reorganization of the Division of Fruit Fly Investigations was approved to include the work on the Japanese beetle, European chafer, Hall scale, and oriental fruit fly (T. Roy Reid to Avery S. Hoyt, Feb. 25, 1952).

August 24, 1951.—The establishment of the Division of Stored Product Insect Investigations was approved to supersede the Division of Control Investigations and include certain functions of the Divisions of Cereal and Forage Insects, Fruit Insects, Truck Crop and Garden Insects, and Man and Insects (James Buckley to P. V. Cardon, Aug. 24, 1951).

June 14, 1951.—The establishment of four regional offices to regionalize all administrative and regulatory work, except the Divisions of Foreign Plant Quarantines and Grasshopper Control, was approved (T. Roy Reid to P. V. Cardon, June 14, 1951).

February 13, 1951.—The four Assistant Chiefs of the Bureau for Regulatory, Research, Control, and Insecticides and Chemistry were assigned supervision over specific divisions (T. Roy Reid to P. V. Cardon, Feb. 13, 1951).

February 13, 1951.—The Division of Insect Pest Survey and Information was redesignated the Division of Insect Survey and Identification (T. Roy Reid to P. V. Cardon, Feb. 13, 1951).

February 13, 1951.—The Divisions of Golden Nematode Control, Japanese Beetle Control, and the Gypsy and Brown-Tail Moth Control were redesignated as projects (T. Roy Reid to P. V. Cardon, Feb. 13, 1951).

January 31, 1949.—The establishment of the Golden Nematode Division was approved (N. R. Bear to P. V. Cardon, Jan. 31, 1949).

February 23, 1942.—By Executive Order 9069, the Bureau of Entomology and Plant Quarantine became a part of the Agricultural Research Administration.

January 29, 1942.—The Division of Grasshopper Control was established by the transfer of activities relating to grasshopper, chinch bug, and Mormon cricket control from the Division of Domestic Quarantines (James L. Buckley to P. N. Annand, Jan. 29, 1942).

November 19, 1935.—The Divisions of Japanese Beetle and Asiatic Beetle Investigations were made a part of the Division of Fruit Insect Investigations (Lee O. Strong to Chiefs of Divisions, Nov. 19, 1935).

September 1, 1934.—The Insecticide Division of the Bureau of Chemistry and Soils was transferred to the Bureau of Entomology and Plant Quarantine by an order of the Secretary.

July 1, 1934.—In accordance with the reorganization directed by the Secretary and authorized by Congress, the Bureaus of Entomology and Plant Quarantine were combined to form the Bureau of Entomology and Plant Quarantine (48 Stat. 486). The new Bureau was composed of the following divisions by subject groupings: Research Units with Fruit Insect Investigations, Japanese Beetle Investigations, Forest Insects, Truck Crop and Garden Insects, Cereal and Forage Insects, Cotton Insects, Bee Culture, Insects Affecting Man and Animals, Insect Identification, Foreign Parasite Introduction, and Control Investigations; and Quarantine, Eradication, and Control Units with Foreign Plant Quarantines, Domestic Quarantines, Plant Disease Eradi-

cation, Japanese Beetle and European Corn Borer Control, Gypsy and Brown-Tail Moths, Mexican Fruit Fly, Date Scale Eradication, and Pink Bollworm and *Thurberia* Weevil.

BUREAU OF HUMAN NUTRITION AND HOME ECONOMICS

November 2, 1953.—The functions of the Bureau of Human Nutrition and Home Economics were transferred to the Agricultural Research Service (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953).

These were assigned January 2, 1954, to the Director, Human Nutrition and Home Economics (ARS Memo. 101.1, Dec. 28, 1953).

August 10, 1949.—Certain functions relating to the coordination of nutrition services made available by Federal, State, and other agencies were transferred from the Production and Marketing Administration to the Bureau of Human Nutrition and Home Economics in connection with Reorganization Plan III (Secretary's Memo. 1239, Aug. 10, 1949).

February 13, 1943.—The functions of the Division of Protein and Nutrition Research formerly in the Bureau of Agricultural and Industrial Chemistry were combined with those of the former Bureau of Home Economics in the redesignated Bureau of Human Nutrition and Home Economics (ARA Administrator's Memo. 5, Feb. 13, 1943).

July 1, 1924.—The Division of Textiles and Clothing was created.

July 1, 1923.—The Office of Home Economics was reorganized as the Bureau of Home Economics pursuant to the provisions of the Agricultural Appropriation Act for the 1924 fiscal year (Secretary's Memo. 436, June 8, 1923).

July 1, 1915.—The nutrition and home economics work was removed from the Office of Experiment Stations and established as the Office of Home Economics within the States Relations Service (Secretary's Memo. 140, June 8, 1915).

BUREAU OF PLANT INDUSTRY, SOILS, AND AGRICULTURAL ENGINEERING

November 2, 1953.—The Bureau of Plant Industry, Soils, and Agricultural Engineering was abolished and its functions were transferred to the Agricultural Research Service (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953). By Agricultural Research Service Memorandum 101.1, December 28, 1953, the functions of the former Bureau were assigned to the Director, Crops Research, and the Director, Farm and Land Management Research. Prior to its abolition, the Bureau was organized under the following directors in charge of the divisions listed. Director of Research, Agricultural Engineering: Farm Buildings and Rural Housing, Farm Electrification, Farm Machinery, and Mechanical Processing of Agricultural Products. Director of Research, Field Crops: Cereal Crops and Diseases, Cotton and Other Fiber Crops and Diseases, Forage Crops and Diseases, Rubber Plant Investigations, Sugar Plant Investigations, and Weed Investigations. Director, Horticultural Crops Research: Forest Pathology; Fruit and Nut Crops and Diseases; Handling, Transportation, and Storage of Horticultural Crops; Mycology and Disease Survey; Nematology Investigations; Ornamental Plant Crops and Diseases; Plant Exploration and Introduction; and Vegetable Crops and Diseases. Director, Soils Research: Fertilizer and Agricultural Lime; Soil Management, Humid Regions; Soil Management, Irrigated and Dry Land Regions; and Soil and Plant Relationships.

December 18, 1952.—The organization of the Division of Soil Management, Irrigated and Dry Lands, and of the Division of Soil Management, Humid Regions, was approved. In these divisions were combined the soil management research of the former Division of Soil Management and Irrigation Agriculture and phases of soil management dealing with soil erosion control and water management transferred by Secretary's Memorandum 1318, October 14, 1952, from the Soil Conservation Service to the Agricultural Research

Administration and redelegated by Agricultural Research Administration Memorandum 34 of the same date to the Bureau of Plant Industry, Soils, and Agricultural Engineering (T. Roy Reid to A. H. Moseman, Dec. 18, 1952; BPI Memo. 2083, Jan. 16, 1953).

December 18, 1952.—Pursuant to Secretary's Memorandum 1318, October 14, 1952, the work on basic soil and plant relationships of the former Division of Soil Management and Irrigations was combined with basic research in laboratories in Ithaca, N.Y., and Riverside, Calif., to form the Division of Soil and Plant Relationships (Approved by Memo. from T. Roy Reid to A. H. Moseman, Dec. 18, 1952).

November 15, 1952.—The Division of Soil Survey was transferred from the Bureau of Plant Industry, Soils, and Agricultural Engineering to the Soil Conservation Service (Secretary's Memo. 1318, Oct. 14, 1952).

February 4, 1952.—The redesignation of the Division of Soil Management and Irrigation as the Division of Soils Management and Irrigation Agriculture was approved (N. R. Bear, Feb. 4, 1952).

May 10, 1951.—The Division of Fruit and Vegetable Crops and Diseases was reorganized in four new divisions: Vegetable Crops and Diseases; Ornamental Plant Crops and Diseases; Handling, Transportation, and Storage of Horticultural Crops; and Fruit and Nut Crops and Diseases (BPI Memo. to Heads of Divisions, May 10, 1951).

May 1, 1951.—Research work of the Bureau of Plant Industry, Soils, and Agricultural Engineering was organized under four directors: Agricultural engineering, field crops, horticultural crops, and soils (USDA Press Release 1081-51, Apr. 30, 1951).

December 20, 1949.—The establishment of the Division of Weed Investigations was approved on a tentative basis (T. Roy Reid to P. V. Cardon, Dec. 20, 1949).

October 6, 1947.—The redesignation of the Division of Farm Power and Machinery to the Division of Farm Machinery was approved (N. R. Bear to W. V. Lambert, Oct. 6, 1947).

September 18, 1947.—The Division of Soils, Fertilizer, and Irrigation was discontinued and was superseded by the Division of Soil Management and Irrigation and the Division of Fertilizer and Agricultural Lime, which with the already existent Division of Soil Survey were grouped under an Assistant Chief of the Bureau in charge of soils work (BPI Memo. 1902, Sept. 18, 1947).

August 1, 1945.—The Division of Tobacco, Medicinal, and Special Crops was established by combining the former Divisions of Tobacco Investigations and Drug and Related Plants (BPI Memo. 1701, Aug. 1, 1945).

May 28, 1945.—The Divisions of Soil and Fertilizer Investigations, Dry Land Agriculture, and Irrigation Agriculture were consolidated in the Division of Soils, Fertilizers, and Irrigation (BPI Memo. 1677, May 28, 1945).

September 5, 1944.—The redesignation of the Section of Mechanical Processing of Farm Products as the Division of Mechanical Processing of Farm Products was approved (N. R. Bear to E. C. Auchter, Sept. 5, 1944).

March 12, 1943.—The divisions transferred from the Bureau of Agricultural Chemistry and Engineering were combined in a single division, the Division of Agricultural Engineering (BPI Memo. 1417, Mar. 12, 1943).

February 13, 1943.—Pursuant to Executive Order 9069 and in conformity with Secretary's Memorandums 960 and 986, the Bureau of Plant Industry, Soils, and Agricultural Engineering was established by the merging of agricultural engineering work transferred from the Bureau of Agricultural Chemistry and Engineering with the Bureau of Plant Industry (ARA Administrator's Memo. 5, Feb. 13, 1943).

February 23, 1942.—The Bureau of Plant Industry became a part of the Agricultural Research Administration (Executive Order 9069, Feb. 23, 1942).

During 1940.—The Divisions of Soil Chemistry and Physics, Soil Microbiology, Fertilizer Research, and Soil Fertility were combined into the Division of Soil and Fertilizer Research.

December 1, 1939.—The Fertilizer Research Division of Agricultural Chemistry and Engineering was placed under the supervision of the Chief of the Bureau of Plant Industry and was formally transferred on July 1, 1940.

October 16, 1938.—Under the reorganization of the Department, the Bureau of Plant Industry was assigned certain functions formerly performed by the Bureau of Chemistry and Soils and the Bureau of Agricultural Engineering. From the Bureau of Chemistry and Soils was transferred the work of the Division of Soil Chemistry and Physics, the Division of Soil Survey, and the unit conducting research on plant mineral constituents derived from soils (Secretary's Memo. 784, Oct. 6, 1938). From the Bureau of Agricultural Engineering was transferred the work of the Divisions of Irrigation and Drainage relating to crop production on irrigable lands, the quality of irrigation water and its use by crops, and methods of improving and maintaining the productivity of irrigated soils. Following this expansion of functions the Bureau included the following divisions: Soil Chemistry and Physics, Soil Microbiology, Soil Fertility, Soil Survey, Cereal Crops and Diseases, Cotton and Other Fiber Crops and Diseases, Fruit and Vegetable Crops and Diseases, Forage Crops and Diseases, Forest Pathology, Mycology and Disease Survey, Plant Exploration and Introduction, Nematology, Drug and Related Plants, Seed Investigations, Sugar Plant Investigations, Tobacco and Plant Nutrition, Dry Land Agriculture, and Irrigation Agriculture.

July 1, 1938.—The Division of Western Irrigation Agriculture was redesignated the Division of Irrigation Agriculture and hydrological phases of farm irrigation and drainage were transferred to the Soil Conservation Service.

March 19, 1936.—The personnel and property of the Division of Genetics and Biophysics were transferred to the Division of Cereal Crops and Diseases (BPI Memo. 877, Mar. 19, 1936).

May 1935.—The Division of Soil Microbiology Investigations was redesignated the Division of Soil Microbiology (Director of Personnel to Chiefs of Bureaus, May 17, 1935).

September 1, 1934.—The Divisions of Soil Fertility Investigations and Soil Microbiology were transferred from the Bureau of Chemistry and Soils to the Bureau of Plant Industry.

February 9, 1934.—The Division of Plant Exploration and Introduction was established by the merging of the former Division of Foreign Plant Introduction, including the project on erosion plant nurseries; the project on rubber and other tropical plants of the former Division of Cotton, Rubber, and Other Tropical Plants; and the former Division of Botany. The Division of Cotton and Other Fiber Crops and Diseases was formed by the merging of the project on breeding and cultural improvement of cotton, including cotton diseases, of the former Division of Cotton, Rubber, and Other Tropical Plants; and the former Divisions of Egyptian Cotton Breeding and Fiber Plant Investigations (BPI Memo. 758, Feb. 9, 1934).

December 1, 1933.—The Division of Plant Disease Eradication and Control was established, in accordance with instructions from the Secretary, by the merging of the divisions or projects on barberry eradication, blister rust control, citrus canker eradication, Dutch elm disease control, and phony peach eradication. On July 1, 1934, the Division was transferred to the Bureau of Entomology and Plant Quarantine (BPI Memo. 746, Dec. 1, 1933).

July 1, 1933.—The Division of Horticultural Crops and Diseases was redesignated the Division of Fruit and Vegetable Crops and Diseases (BPI Memo. 717, June 27, 1933).

April 22, 1931.—In accordance with the suggestion of the Office of the Secretary, all units (laboratories or offices) reporting directly to the Chief of the Bureau were redesignated as divisions (BPI Memo. 576, Apr. 22, 1931). These included: Arlington Experiment Farm; Barberry Eradication; Blister Rust Control; Botany; Cereal Crops and Diseases; Citrus Canker Eradication; Cotton, Rubber, and Other Tropical Plants; Drug and Related Plants; Dry Land Agriculture; Egyptian Cotton Breeding; Fiber Plant Investigations; Forage Crops and Diseases; Foreign Plant Introduction; Forest

Pathology; Gardens and Grounds; Genetics and Biophysics; Horticultural Crops and Diseases; Mycology and Disease Survey; Nematology; Phony Peach Eradication; Seed Investigations; Sugar Plant Investigations; Tobacco and Plant Nutrition; and Western Irrigation Agriculture.

July 1, 1901.—The Bureau of Plant Industry was established and included the former Divisions of Vegetable Physiology and Pathology, Agrostology, Pomology, Botany, Seed and Plant Introduction, and Experimental Gardens (31 Stat. 926). Following the reorganization of work, organizational units were generally referred to as "offices."

October 1, 1900.—The Superintendent of Experimental Gardens and Grounds was designated Director of Plant Industry and was charged with unifying the work of certain divisions including: The Division of Pomology, established July 1, 1886; the Division of Vegetable Physiology and Pathology, established in 1890 as the Division of Vegetable Pathology and redesignated in 1895 as the Division of Vegetable Physiology and Pathology; the Division of Agrostology, established July 1, 1895; and the Division of Botany, established in 1868 (General Order 41, Oct. 1, 1900).

BUREAU OF PLANT QUARANTINE

July 1, 1934.—The Bureau of Plant Quarantine was combined with the Bureau of Entomology to form the Bureau of Entomology and Plant Quarantine. On January 30, 1934, the Bureau of Plant Quarantine was composed of the following divisions: Foreign Plant Quarantines, Domestic Quarantines, Technological, Japanese Beetle and European Corn Borer, Pink Bollworm and *Thurberia* Weevil, Moths, Mexican Fruit Fly, and Date Palm Scale (48 Stat. 486).

July 1, 1932.—The Bureau of Plant Quarantine was established as the successor of the Plant Quarantine and Control Administration (47 Stat. 640).

July 1, 1928.—The Plant Quarantine and Control Administration was established to centralize regulatory and control activities relating to insects and plants. At the same time the Federal Horticultural Board, established by a special order of the Secretary, August 21, 1912, was abolished (45 Stat. 564). To the Administration was transferred regulatory work of the Bureau of Entomology and the Bureau of Plant Industry. The work was assigned to the following divisions (PQ Memo. 1, July 19, 1928): Foreign Plant Quarantines, Domestic Plant Quarantines, Pink Bollworm and *Thurberia* Weevil Control, Date Scale Control, European Corn Borer Control, Japanese Beetle Control, and Mexican Fruit Worm Control.

BUREAU OF SOILS

July 1, 1927.—The Bureau of Soils was combined with the nonregulatory work of the Bureau of Chemistry to form the Bureau of Chemistry and Soils (44 Stat. 991). At this time the Bureau of Soils was composed of the following divisions: Soil Survey, Soil Chemistry, Soil Physics, and Fertilizer Resources.

July 1, 1926.—The Fixed Nitrogen Laboratory (established March 29, 1919, in the War Department and transferred to the Department of Agriculture on July 1, 1921, where it was established as an independent unit) was transferred to the Bureau of Soils.

November 1, 1915.—The Fertilizer Investigation Division, later referred to as the Fertilizer Resources Division, was established (Bureau of Soils, *Annual Report*, 1916, p. 4).

1915.—Soil laboratories were reorganized and combined in the Chemical Division, later referred to as the Soil Chemistry Division (Bureau of Soils, *Annual Report*, 1916, p. 7).

1907.—The Division of Utilization of Soil Resources was established (Bureau of Soils, *Annual Report*, 1907, p. 424). Work on soil utilization was discontinued June 30, 1908, at the direction of the Secretary (Bureau of Soils, *Annual Report*, 1908, p. 21).

1902.—The Division of Soil Management was established.

July 1, 1901.—The Division of Soils was redesignated the Bureau of Soils (31 Stat. 931).

February 15, 1894.—The Division of Agricultural Soils was established in the Weather Bureau (Memo. from the Secretary to Mark W. Harrington, Feb. 15, 1894). The following year it became an independent division in the Department and in 1897 was redesignated the Division of Soils.

Agricultural Stabilization and Conservation Service

The Agricultural Stabilization and Conservation Service is responsible for the formulation and administration of programs in the general fields of production adjustment, conservation assistance, and price and market stabilization. It provides overall planning and administration for the price support, inventory management, procurement, disposal operations, and other programs of the Commodity Credit Corporation. The Administrator of the Agricultural Stabilization and Conservation Service serves as Executive Vice President of the Commodity Credit Corporation. The Under Secretary of Agriculture serves as President. The Secretary of Agriculture serves as Chairman of the Board of Directors of the Commodity Credit Corporation. The Agricultural Stabilization and Conservation Service is headed by an Administrator who reports to the Assistant Secretary for Marketing and Stabilization. The Administrator is assisted by an Associate Administrator and five Deputy Administrators. The Area Directors, State and county offices, Defense Services Staff, Disaster and Livestock Feed Staff, Bin Storage Division, and Compliance and Aerial Photography Division report to the Deputy Administrator, State and County Operations. Three divisions: Conservation Analysis, Conservation Programs, and Soil Bank, report to the Deputy Administrator for Conservation. Eight divisions: Cotton; Grain; Livestock, Dairy and Poultry; Oils and Peanut; Sugar; Tobacco; Price; and Milk Marketing Orders report to the Deputy Administrator, Price and Production. The Inventory Management Division and the Transportation Services Division report to the Deputy Administrator, Commodity Operations.

Agricultural Stabilization and Conservation Service Commodity Offices and the Cotton Products and Export Operations Office also report to the Deputy Administrator, Commodity Operations. Six divisions concerned with management: Investigation, Internal Audit, Administrative Services, Budget, Fiscal, and Personnel Management; the Information Division, the Operations Analysis Staff; and a Data Processing Center at Kansas City report to the Deputy Administrator, Management (ASCS, Functions and Operating Relationships, 1-AO, Rev. 1, Amend. 3, Mar. 27, 1962).

March 20, 1962.—The Food and Materials Division was abolished and its functions reassigned (ASCS Notice AO-6, Mar. 23, 1962).

December 7, 1961.—Title of Program Analysis Division was changed to Conservation Analysis Division (ASCS Notice PM-152, Dec. 7, 1961).

November 21, 1961.—Title of the Livestock and Dairy Division was changed to Livestock, Dairy and Poultry Division to provide for the marketing order programs which were authorized in the Agricultural Act of 1961 (ASCS Notice PM-149, Dec. 7, 1961).

November 2, 1961.—Functions relating to agreements with marketing cooperatives, trade associations, or other handlers for advertising and sales promotion programs under section 708 of the National Wool Act of 1954 were transferred from the Agricultural Marketing Service to the Agricultural Stabilization and Conservation Service. These functions were assigned to the Livestock and Dairy Division of the Agricultural Stabilization and Conservation Service (ASCS, Notice General 693, Nov. 2, 1961).

June 5, 1961.—Title of Commodity Stabilization Service was changed to Agricultural Stabilization and Conservation Service. Organizational changes were made to incorporate the functions transferred by the Secretary under

authority of Reorganization Plan II of 1953. A Conservation Programs Division and a Program Analysis Division were established to carry out the functions which had been assigned to the Agricultural Conservation Program Service. A Milk Marketing Orders Division was established to administer milk marketing orders which had been a responsibility of the Agricultural Marketing Service. The function of administering tobacco marketing agreements, which had been transferred from the Agricultural Marketing Service, was assigned to the Tobacco Division. The transfer of functions and personnel which resulted in the discontinuance of the Agricultural Conservation Program Service as a separate agency within the Department and the transfer of responsibility for milk and tobacco marketing orders had been announced by the Secretary before the Commodity Stabilization Service became the Agricultural Stabilization and Conservation Service on June 5, 1961 (Secretary's Memo. 1446, Feb. 24, 1961; Secretary's Memo. 1446, Supp. 2, Apr. 19, 1961; ASCS, Notice General 668, June 6, 1961; Secretary's Memo. 1458, June 14, 1961; and USDA Press Release 1871-61, June 15, 1961).

COMMODITY STABILIZATION SERVICE

April 24, 1961.—Functions of the General Sales Manager and the Barter and Stockpiling Division of the Commodity Stabilization Service were transferred to the Foreign Agricultural Service (Secretary's Memo. 1446, Supp. 2, Apr. 19, 1961).

April 12, 1960.—Title of the Food and Materials Requirements Division of the Commodity Stabilization Service was changed to the Food and Materials Division (CSS Notice General 587, Apr. 29, 1960).

December 2, 1958.—Directives Systems Analysis Division of the Commodity Stabilization Service was established (CSS Notice General 506, Dec. 30, 1958).

June 3, 1957.—The name of the Audit Division of the Commodity Stabilization Service was changed to Internal Audit Division (CSS Notice General 420, June 3, 1957).

June 18, 1956.—Soil Bank Division was established within the Commodity Stabilization Service (CSS Notice General 365, June 18, 1956).

December 9, 1955.—Commodity Disposal Coordination Division was abolished and its functions reassigned. All functions except dispositions of commodities under Title I of Public Law 480 were transferred to the Deputy Administrator, Price Support. Remaining functions were transferred to the Office of the General Sales Manager (CSS Notice General 337, Dec. 9, 1955).

July 1, 1955.—General Sales Manager of the Commodity Stabilization Service was appointed (CSS Notice General 305, June 28, 1955).

June 9, 1955.—Transportation and Warehousing Division was replaced by the Transportation and Storage Services Division (CSS Notice General 307, July 12, 1955).

January 3, 1955.—Organizational changes within the Commodity Stabilization Service included establishment of the Office of Deputy Administrator, Operations, reporting to the Administrator and the establishment of a Barter and Stockpiling Division, reporting to the Deputy Administrator, Price Support (CSS Notice General 274, Dec. 16, 1954).

March 19, 1954.—Action was initiated to change name of Mobilization Activities Division to Food and Materials Requirements Division, effective by April 28, 1954 (CSS Instruction 101-14, Mar. 19, 1954; CSS Instruction 1209-1, Apr. 28, 1954).

November 2, 1953.—The Commodity Stabilization Service succeeded the Production and Marketing Administration with responsibility for adjustment activities, stabilization of sugar production, price support, foreign supply programs, commodity disposal, and administration of the International Wheat Agreement. Most marketing and distribution functions of the Production and Marketing Administration were transferred to the Agricultural Marketing Service. As first organized, the Commodity Stabilization Service had an Administrator, an Associate Administrator and a Deputy Administrator,

Production Adjustment, a Deputy Administrator, Price Support, and an Assistant Administrator for Management. The Service had six commodity divisions; three divisions concerned with management operations; an Information Division; a Compliance and Investigation Division, an Audit Division, a Performance and Aerial Photography Division; a Commodity Disposal Coordination Division; a Fiscal Division; a Price Division; a Transportation and Warehousing Division; and a Mobilization Activities Division (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953; CSS Notice General 196, Dec. 11, 1953).

PRODUCTION AND MARKETING ADMINISTRATION AND COMMODITY CREDIT CORPORATION

September 30, 1953.—Office of Materials and Facilities and the Office of Requirements and Allocations of the Production and Marketing Administration were abolished and their functions were transferred to a new Mobilization Activities Branch effective at close of business September 30, 1953 (PMA Notice General 165, Sept. 8, 1953).

January 21, 1953.—Production and Marketing Administration, Commodity Credit Corporation, Commodity Exchange Authority, and the Federal Crop Insurance Corporation were grouped into a functional group called Commodity Marketing and Adjustment (Secretary's Memo. 1320, Jan. 21, 1953).

January 21, 1953.—The Agricultural Conservation Programs Branch of the Production and Marketing Administration was transferred out of the Production and Marketing Administration and set up as a separate service (Secretary's Memo. 1320, Jan. 21, 1953).

June 7, 1951.—Agricultural Conservation Programs Branch of the Production and Marketing Administration, which had been responsible to the Assistant Administrator for Production, was directed to report directly to the Administrator. The Branch was to have as its primary responsibility planning and long-range conservation development. Five area directors were, beginning about July 1, to perform the administrative work in the field which had been handled by program office of the Agricultural Conservation Programs Branch. The area directors were to report to the Assistant Administrator for Production (PMA, *Weekly Bulletin*, June 7, 1951).

April 16, 1951.—The Price Staff of the Production and Marketing Administration was replaced by an Office of Price (PMA Instruction 101-7, Apr. 16, 1951).

December 8, 1950.—Assistant Administrator for Management of the Production and Marketing Administration was redesignated Assistant Administrator for Program Coordination to reflect assignment of additional functions and responsibilities (PMA Instruction 101-1, Aux. 2, Dec. 8, 1950).

September 18, 1950.—A number of organizational changes were made within the Production and Marketing Administration. The Price Support and Foreign Supply Branch was abolished and its functions were reassigned. A Price Staff, an Administrator's Program Staff, an Office of Materials and Facilities, and an Office of Requirements and Allocations were established. The Food Distribution Programs Branch was renamed Food Distribution Branch. Functions relating to U.S. civilian food supply requirements and other civilian food supply defense activities were assigned to the Food Distribution Branch (PMA Instruction 101-3, Sept. 18, 1950).

November 28, 1949.—Marketing Research Branch and Marketing Facilities Branch of the Production and Marketing Administration were abolished with major functions of both assigned to Marketing and Facilities Research Branch (PMA Administrative Notice 150, Nov. 28, 1949).

November 12, 1949.—Position of Assistant Administrator for Commodity Operations was established within the Production and Marketing Administration to direct the activities of Fiscal Branch, Price Support and Foreign Supply Branch, Transportation and Warehousing Branch, PMA Commodity Branches, Wheat Agreement Staff (PMA Administrative Notice 149, Nov. 12, 1949).

September 27, 1949.—Shipping and Storage Branch of the Production and Marketing Administration was abolished, with its major functions transferred to the Transportation and Warehousing Branch (PMA Administrative Notice 139, Sept. 27, 1949).

September 15, 1949.—Organizational changes were made within the Production and Marketing Administration. The Budget, Personnel and Administrative Services Divisions of the former Budget and Management Branch were established as the Office of Budget, Office of Personnel Services, and the Office of Administrative Services. A Program Management Staff was established with functions which included those of the Organization and Management Division of the former Budget and Management Branch. The Audit Branch and the Compliance and Investigation Branch were redesignated the Office of Audit and the Office of Compliance and Investigation (PMA 111.31, Sept. 15, 1949).

August 9, 1949.—The position of Assistant Administrator for Management was established within the Production and Marketing Administration. The Budget and Management Branch was abolished (PMA Instruction 111.29, Aug. 9, 1949).

July 1, 1948.—Congress, in Public Law 806 of June 29, 1948, established the Commodity Credit Corporation as an agency and instrumentality of the United States under a permanent Federal charter. Powers were vested in the Board of Directors, two of whom were not to be employees of the U.S. Department of Agriculture. Following enactment of this legislation, the position of Assistant Administrator of the Production and Marketing Administration for the Commodity Credit Corporation was discontinued. A Secretary's Memorandum of August 30, 1948, stated that the Production and Marketing Administration would continue to exercise the functions for the Commodity Credit Corporation assigned to it by the Corporation (Secretary's Memo. 1226, Aug. 30, 1948).

March 31, 1948.—Labor Branch of the Production and Marketing Administration was abolished. A Labor Camp Disposal Officer had been designated on November 3, 1947 (PMA Administrative Notice 88, Mar. 26, 1948).

July 1, 1947.—Federal Crop Insurance Corporation transferred out of the PMA and reinstated as separate agency within the Department (Secretary's Memo. 1196, June 26, 1947).

July 1, 1947.—Marketing Research Branch of the Production and Marketing Administration was established (PMA, Instruction 111.1, July 1, 1947). Establishment of this Branch was related to the transfer of responsibility for research programs in the field of marketing and marketing research activities with reference to technical improvement of market facilities, transportation methods, packing and packaging, and wholesale and retail market practices from the Bureau of Agricultural Economics to the Production and Marketing Administration (Secretary's Memo. 1198, July 11, 1947).

July 1, 1947.—The Field Service Branch of the Production and Marketing Administration was discontinued (PMA, General Memo. 6, June 27, 1947).

April 1, 1947.—Effective date announced by the Secretary on March 19, 1947, for organizational changes in the Production and Marketing Administration. Some changes were delayed beyond this date. The Assistant Administrator for Production was to have responsibility for direct supervision over the Agricultural Conservation Programs Branch and the Labor Branch, and was to provide a central point of coordination for all PMA programs administered in State and county offices. The position of Assistant Administrator for Commodity Credit Corporation was established with responsibility for direct supervision over the activities of the Fiscal Branch, the Shipping and Storage Branch, and a Price Support and Foreign Supply Branch. Temporary plans had been announced on September 30, 1946, for establishment of an Agricultural Conservation Programs Branch on October 1, 1946. Establishment of the Branch was delayed (Secretary's Memo. 1188, Mar. 19, 1947; PMA, Administrative Notice 54, Mar. 28, 1947; and PMA Temporary 111.22, Sept. 30, 1946).

March 31, 1947.—Office of Transportation Officer of the Production and Marketing Administration was abolished with continuing functions transferred to the Marketing Facilities Branch on April 1, 1947 (PMA Procedure Transmittal 110.5, Mar. 14, 1947).

March 14, 1947.—The following offices and branches of the Production and Marketing Administration were abolished: Special Commodities Branch, Materials and Equipment Branch, Office of Requirements and Allocations, Office of Foreign Programs Coordination, and Office of Price (Secretary's Memo. 1118, Supp. 10, Mar. 14, 1947). Plans had been announced on September 30, 1946, for the abolition of most of these branches and offices and for abolition of the Field Service Branch but action was delayed (PMA Temporary 111.22, Sept. 30, 1946, and Letter, Clinton P. Anderson to Albert S. Goss, Oct. 30, 1946). The continuing functions of the Materials and Equipment Branch were transferred to the Field Service Branch. The continuing coordination and liaison functions of the Office of Requirements and Allocations and the Office of Foreign Programs Coordination were assigned to an Assistant to the Administrator for International Food Supply Programs. Office of Price functions were assigned to the commodity branches. The Assistant Administrator for Fiscal and Inventory Control was given responsibility for reconciliation and claims coordination work formerly performed by the Office of Foreign Programs Coordination (PMA Procedure Transmittal 110.7, Mar. 14, 1947).

February 1, 1947.—The Commodity Exchange Authority was established, and the function of administering the Commodity Exchange Act was transferred to it (Secretary's Memo, 1185, Jan. 21, 1947).

December 17, 1945.—An Office of Audit was established as a staff office of the Production and Marketing Administration (Secretary's Memo. 1118, Supp. 6, Dec. 17, 1945).

December 6, 1945.—Functions of Foreign Food Programs Branch were reassigned (PMA Procedure Transmittal 111.2, Dec. 6, 1945).

November 29, 1945.—Office of Surplus Property and Reconversion was abolished and its functions were reassigned to the Office of the Secretary and the Production and Marketing Administration (Secretary's Memo. 1135, Nov. 29, 1945).

November 26, 1945.—Position of Assistant Administrator for Fiscal and Administrative Control of the Production and Marketing Administration replaced by the position of Assistant Administrator for Fiscal and Inventory Control (Secretary's Memo. 1118, Supp. 4, Nov. 26, 1945).

November 16, 1945.—The Secretary announced that an Office of Program Policy Coordination was replacing the Office of Price of the Production and Marketing Administration. The memorandum was rescinded on December 5, 1945 (Secretary's Memo. 1118, Supp. 3, Nov. 16, 1945, and Supp. 5, Dec. 5, 1945).

October 20, 1945.—Foreign Food Programs Branch was established within the Production and Marketing Administration (PMA, Administrator's Memo. 1, Rev. 1, Supp. 3, Oct. 22, 1945, and Secretary's Memo. 1130, Oct. 19, 1945).

October 8, 1945.—The Federal Crop Insurance Corporation set up as a bureau within the Production and Marketing Administration. A September 12, 1945, memorandum had assigned crop insurance functions to the branches of the Production and Marketing Administration. This action was rescinded on September 29, 1945 (Secretary's Memo. 1118, Supp. 1, Oct. 8, 1945, and PMA, Administrator's Memo. 2, Supp. 6, Amend. 1, Sept. 29, 1945).

August 27, 1945.—Assistant Administrator of the Production and Marketing Administration for Regulatory and Inspection Work was redesignated the Assistant Administrator for Regulatory and Marketing Service Work (PMA, Administrator's Memo. 1, Rev. 1, Aug. 25, 1945).

August 24, 1945.—Claimants Program Coordination Office established as a staff office of the Production and Marketing Administration to carry out functions formerly performed by the Program Liaison Branch of the Office of Supply (PMA, Administrator's Memo. 3, Aug. 24, 1945).

August 20, 1945.—The Production and Marketing Administration was established. The following offices and agencies were brought into the new Administration: Offices of the Manager and Secretary of the Federal Crop Insurance Corporation, Office of the President of the Commodity Credit Corporation, the Federal Surplus Commodities Corporation (in liquidation), the Office of Basic Commodities, the Office of Supply, the Office of Marketing Services, the Agricultural Adjustment Agency, the Office of Requirements and Allocations, the Office of Price, the Office of Materials and Facilities, the Office of Labor, the Office of Home Food Supply, the Office of Investigatory Services, and the Office of Transportation. As first established, the Production and Marketing Administration had 19 branches and a number of staff offices. The branches included: 10 commodity branches, Field Service Branch, Food Distribution Programs Branch, Materials and Equipment Branch, Shipping and Storage Branch, Marketing Facilities Branch, Labor Branch, Fiscal Branch, Budget and Management Branch, and a Compliance and Investigation Branch. Most of the functions previously carried out by the Agricultural Adjustment Agency were to be administered by the new Field Service Branch. The Administrator was assisted by a Deputy Administrator, Assistant Administrator for Fiscal and Administrative Control, Assistant Administrator for Regulatory and Inspection, and an Assistant Administrator for Inventory Management (Secretary's Memo. 1118, Aug. 18, 1945, and PMA, Administrator's Memo. 1, Aug. 18, 1945).

WAR FOOD ADMINISTRATION

June 30, 1945.—The War Food Administration was terminated and its functions were transferred to the Secretary of Agriculture (Executive Order 9577, June 29, 1945; 10 F.R. 8087).

June 30, 1945.—Authority for the Federal Surplus Commodities Corporation expired. After that date all programs were in a state of liquidation (Federal Surplus Commodities Corporation, *Report for the Fiscal Year 1945*, p. 1).

June 5, 1945.—Office of Home Food Supply established within the War Food Administration (WFA, Administrator's Memo. 27, Rev. 1, Supp. 5, June 5, 1945).

April 12, 1945.—Functions of the Requirements and Allocations Branch of the Office of Supply of the Commodity Credit Corporation were transferred to the Office of the Administrator of the War Food Administration (WFA, Administrator's Memo. 27, Rev. 1, Amend. 7, Apr. 11, 1945).

March 23, 1945.—The Office of Investigatory Services was established within the War Food Administration (WFA, Administrator's Memo. 27, Rev. 1, Supp. 4, Mar. 21, 1945).

March 10, 1945.—The Board of Directors of the Commodity Credit Corporation was reconstituted to consist of the following: War Food Administrator, Chairman; Assistant War Food Administrator; the Secretary of Agriculture; the President of the Commodity Credit Corporation; Vice President and Director of Basic Commodities; Vice President and Director of Supply; Chief of the Agricultural Adjustment Agency; and the Director of Price (WFA, Administrator's Memo. 27, Rev. 1, Amend. 4, Mar. 14, 1945).

February 22, 1945.—The Office of Supply of the Commodity Credit Corporation had the following branches: Procurement and Price Support, Program Liaison, Reports and Special Programs, Requirements and Allocations, Sales, School Lunch and Distribution, and Shipping and Storage. It also had an Investigations Division and an Office of Field Relations (CCC, President's Memo. 1, Rev. 1, Feb. 26, 1945).

February 22, 1945.—The Office of Basic Commodities of the Commodity Credit Corporation was headed by a Director who served as Vice President of the Commodity Credit Corporation. It had the following six divisions: Cotton, Grain, Oilseeds, Sugar, Hemp, and General Crops (CCC, President's Memo. 1, Rev. 1, Feb. 26, 1945).

January 26, 1945.—The Commodity Credit Corporation's Board of Directors consisted of the following: War Food Administrator, as chairman; two Vice Presidents; Chief of the Agricultural Adjustment Agency; the Director of Price; and the Director of Surplus Property and Reconversion (U.S. Congress, 79th, 1st sess., Senate, Committee on Banking and Currency, *Hearings on . . . to Continue Commodity Credit Corporation*, Jan. 26 and 29, 1945, p. 34).

January 1, 1945.—The functions and property of the Office of Production relating to feed management and crop production activities were transferred to the Agricultural Adjustment Agency. A Feed Management Division was established in the Agricultural Adjustment Agency (War Food Administrator's Memo. 27, Rev. 1, Dec. 13, 1944, and U.S. Congress, 79th, 1st sess., House of Representatives, Committee on Appropriations, *Hearings on . . . Agriculture Department Appropriation Bill for 1946*, p. 46).

January 1, 1945.—The War Food Administration was reorganized. An Office of Marketing Services, an Office of Supply, and an Office of Basic Commodities were established. The Office of Distribution and the Office of Production were abolished with most of their functions divided between the Office of Marketing Services, the Office of Supply, and the Office of Basic Commodities. Some functions of the Office of Production were transferred to the Agricultural Adjustment Agency. Its land conservation function was transferred to the Soil Conservation Service. The Office of Basic Commodities, Office of Supply, and part of the Office of Marketing Services concerned with direct distribution and school lunch programs were made a part of the Commodity Credit Corporation. The Commodity Credit Corporation's President was designated as the chief executive officer of the Corporation responsible for the general direction of and control over the administrative and fiscal affairs of the Corporation. One Vice President of the Corporation was given responsibility for all program operations which had been assigned to the Director of Basic Commodities. A second Vice President was given responsibility for all program operations which had been assigned to the Director of Supply and for school lunch and direct distribution programs. In carrying out program operations these Vice Presidents were directly responsible to the War Food Administrator. Two staff offices, an Office of Water Utilization and an Office of Transportation, were established within the War Food Administration. The Federal Crop Insurance Corporation was reinstated as an independent agency within the War Food Administration, effective January 1, 1945 (WFA, Administrator's Memo. 27, Rev. 1, Dec. 13, 1944; WFA, Administrator's Memo. 27, Rev. 1, Amend 1, Jan. 5, 1945; and WFA, Administrator's Memo. 27, Supp. 11, Nov. 10, 1944).

November 14, 1944.—The Distribution Planning Branch of the Office of Distribution was established as a staff group under the Deputy Director for Civilian Programs. Personnel, funds, and functions of the Program Appraisal Branch were transferred to this new branch (Office of Distribution, Director's Memo. 2, Supp. 50, Nov. 14, 1944).

October 26, 1944.—Office of Surplus Property and Reconversion established within the War Food Administration (WFA, Administrator's Memo. 27, Supp. 10, Oct. 26, 1944).

June 30, 1944.—The Agricultural Adjustment Agency was headed by a Chief. It had the following five divisions responsible for programs in the United States: East Central, Northeast, North Central, Southern, and Western. An Assistant to the Chief supervised program operations in the insular areas. The other divisions were: Information, Fiscal Management, Personnel, Service Operations, and Budget (*Agricultural Adjustment Agency Report*, 1944, p. 20).

May 20, 1944.—The Procurement Branch of the Office of Distribution was changed to the Procurement and Price Support Branch (Office of Distribution, Director's Memo. 2, Supp. 41, May 20, 1944).

May 1, 1944.—The position of the Chief of Field Relations was established in the Office of the Director of the Office of Distribution (Office of Distribution, Director's Memo. 2, Supp. 40, May 18, 1944).

April 19, 1944.—Organization within the Office of Production was announced. It had three program branches: Crop Production, Feed Management, and Conservation Programs. The Federal Crop Insurance Corporation was a part of the Office of Production (Office of Production, Director's Memo. 1, Apr. 19, 1944).

March 18, 1944.—The Board of Directors of the Commodity Credit Corporation was reconstituted to consist of the War Food Administrator as Chairman, the Director of Production, the Director of Distribution, the Director of Price, the Chief of the Agricultural Adjustment Agency, and the President of the Commodity Credit Corporation. The President of the Corporation was to be responsible for War Food Administration activities for specified unprocessed commodities and for fertilizer and other production facilities. The Director of the Office of Distribution, who had been elected a Vice President of the Corporation, was to be responsible for War Food Administration activities for specified commodities including all processed food and food-processing facilities. On March 9, the Director of Distribution reassigned responsibilities to branches within the Office of Distribution (WFA, Administrator's Memo. 27, Supp. 4, Amend. 2, Mar. 18, 1944, and Office of Distribution, Director's Memo. 2, Supp. 31).

March 9, 1944.—A reorganization of the Office of Distribution was announced. The various branches and divisions were definitely assigned among the four deputy directors. Changes included: (1) The Shipping and Storage Branch was placed under the jurisdiction of the Deputy Director for Supply. It had been established on March 6, 1944, and the functions, funds, and personnel of the Custody and Disposition Division transferred to it. The Custody and Disposition Division appears to have been abolished (War Food Administration, Office of Distribution, Director's Memo. 2, Supp. 30, Mar. 6, 1944). (2) The Marketing Facilities Branch first appears and has some of the functions of the Transportation and Warehousing Branch which does not appear in the new organization. (3) The Procurement Branch first appears in the organization of the Office of Distribution. (4) Some minor changes were made in divisions reporting to the Deputy Director for Management (Office of Distribution, Director's Memo. 2, Supp. 31, Mar. 9, 1944).

January 21, 1944.—Office of Price established within the War Food Administration (WFA, Administrator's Memo. 27, Supp. 4, Jan. 21, 1944).

January 21, 1944.—Name of Food Distribution Administration was changed to Office of Distribution. Food Production Administration was succeeded by the Office of Production. The Agricultural Adjustment Agency, the Soil Conservation Service, and the Farm Security Administration became independent agencies within the War Food Administration (WFA, Administrator's Memo. 27, Supp. 4, Jan. 21, 1944).

January 11, 1944.—Establishment of the Feed and Livestock Branch of the Food Production Administration was announced (Food Production Administration, Food Production Memo. 10, Jan. 11, 1944).

December 30, 1943.—Office of War Board Services was discontinued. Its functions were to be performed by the Chairman of the National War Board (WFA, Administrator's Memo. 11, Rev., Supp. 2, Dec. 30, 1943).

December 1, 1943.—The Food Distribution Administration was reorganized with a Director and three Deputy Directors. Supervision of branches was not specifically assigned to individual deputy directors. The 15 branches consisted of: 9 commodity branches and Compliance, Industry Operations, Transportation and Warehousing, Civilian Food Requirements, Nutrition Programs, and Program Appraisal Branches. Program Liaison, and Requirements and Allocations Control were at an equivalent level. The divisions were Administrative Services, Audit and Fiscal Examination, Budget, Finance and Accounts, Marketing Reports, Organization and Procedure, and Personnel (Food Distribution Administration, Director's Memo. 2, Rev. 1, Dec. 1, 1943).

November 30, 1943.—The Nutrition Programs Branch of the Food Distribution Administration was established to include the remaining functions of the Nutrition and Food Conservation Branch. Food Conservation and Consumer Services functions had been transferred to the Marketing Reports Division on October 21, 1943 (Food Distribution Administration, Director's Memo. 2, Supp. 21, Oct. 21, 1943). The school lunch, school milk, and community food preservation programs had been transferred to the Civilian Food Requirements Branch on October 9, 1943 (Food Distribution Administration, Director's Memo. 2, Supp. 20, Oct. 9, 1943). The Nutrition in Industry Division was transferred to the Civilian Food Requirements Branch effective December 1, 1943 (Food Distribution Administration, Director's Memo. 2, Supp. 24, Nov. 30, 1943).

November 1, 1943.—The Industry Operations Branch of the Food Distribution Administration was established, combining the functions of the Deputy Director for Food Industry Activities with those of the Processors Branch. The Processors Branch was discontinued (Food Distribution Administration, Director's Memo. 2, Supp. 22, Nov. 1, 1943).

October 9, 1943.—The Civilian Food Requirements Branch of the Food Distribution Administration was enlarged by the transfer to it of: (1) The Wholesalers and Retailers Branch; (2) parts of the Nutrition and Food Conservation Branch dealing with school lunch, school milk, and community food preservation programs; and (3) parts of the Office of the Deputy Director for Civilian Activities dealing with food priority certificates and handling of food shortages. This reorganization completed the liquidation of the Civilian Programs Branch (Food Distribution Administration, Director's Memo. 2, Supp. 20, Oct. 9, 1943).

September 25, 1943.—Office of Transportation was established within the War Food Administration (WFA, Administrator's Memo. 27, Sept. 24, 1943).

September 25, 1943.—Office of Labor of the War Food Administration was redesignated the Office of Labor Supply, but it was again redesignated the Office of Labor on November 6, 1943 (WFA, Administrator's Memo. 27, Sept. 24, 1943, and Administrator's Memo. 27, Supp. 1, Nov. 6, 1943).

August 26, 1943.—Office of War Board Services was established within the War Food Administration (WFA, Administrator's Memo. 11, Rev., Aug. 26, 1943).

August 14, 1943.—Food Industries Labor Branch of the Food Distribution Administration was transferred to the Office of Labor (WFA, Administrator's Memo. 2, Rev., Supp. 1, Aug. 14, 1943).

June 21, 1943.—Office of Labor was established (WFA, Administrator's Memo. 2, Rev., June 21, 1943).

May 29, 1943.—Special Representative for State and Local Government Relations was established in the Office of the War Food Administrator to contact Governors of States and State secretaries and commissioners of agriculture (WFA, Administrator's Memo. 12, May 29, 1943).

May 27, 1943.—War Board Services Branch of the Food Production Administration was transferred to the Office of the Administrator of the War Food Administration (WFA, Administrator's Memo. 11, May 27, 1943).

May 10, 1943.—Office of Materials and Facilities was established in the War Food Administration. The Material Control Branch of the Office for Agricultural War Relations, the Facilities Branch of the Food Distribution Administration, the Production Supplies Programs Branch, and the Farm Service and Supply Branch of the Food Production Administration, and the Priority Services Group of the Commodity Credit Corporation were consolidated to form the new Office, which was headed by a Deputy Administrator of the War Food Administration (WFA, Administrator's Memo. 4, May 10, 1943).

April 19, 1943.—The name of the Food Production and Distribution Administration was changed to War Food Administration by Executive Order 9334 (8 F.R. 5423).

April 9, 1943.—The gradual liquidation of the Civilian Programs Division of the Food Distribution Administration due to the suspension of the food

stamp and direct distribution programs was announced. Remaining functions were transferred to other branches by June 1, 1943 (Food Distribution Administration, Director's Memo. 2, Supp. 11, Apr. 9, 1943).

March 26, 1943.—Administration of Food Production and Distribution was established. It included Food Production Administration, except for the Farm Credit Administration, Food Distribution Administration, Extension Service, and the Commodity Credit Corporation (Executive Order 9322, Mar. 26, 1943).

DEPARTMENT AGENCIES TO BE INCLUDED IN WAR FOOD ADMINISTRATION

March 22, 1943.—The Nutrition and Food Conservation Branch of the Food Distribution Administration was established consolidating the Food Conservation Branch with the Nutrition Division. This Division had been transferred to the Department from the Office of Defense, Health and Welfare Services by Executive Order 9310, March 6, 1943 (8 F.R. 2913), and placed in the Food Distribution Administration by Secretary's Memo. 1078, March 11, 1943 (Food Distribution Administration, Director's Memo. 2, Supp. 8, Mar. 22, 1943).

March 15, 1943.—The Manpower Branch of the Food Distribution Administration was renamed the Food Industries Labor Branch (Food Distribution Administration, Director's Memo. 2, Supp. 6, Mar. 15, 1943).

March 1, 1943.—Agricultural Labor Administration was organized. The functions and personnel of the Agricultural Labor Branch of the Food Production Administration were transferred to the Agricultural Labor Administration (Secretary's Memo. 1075, Mar. 1, 1943). The Agricultural Labor Administration was discontinued in a short period, and responsibility was assigned to a Deputy War Food Administrator and later to an Office of Labor.

February 16, 1943.—Price Support and Loans Branch of the Food Production Administration was abolished and its functions transferred to the Production Programs Branch (Food Production Administration, Food Production Memo. 2, Amend. 3, Feb. 16, 1943).

February 16, 1943.—War Board Section was attached to the Office of the Director of the Food Production Administration. Within a short period it was designated the War Board Branch (Food Production Administration, Food Production Memo. 2, Amend. 3, Feb. 16, 1943).

January 25, 1943.—Name of the Agricultural Manpower Branch of the Food Production Administration was changed to Agricultural Labor Branch (Food Production Administration, Food Production Memo. 2, Amend. 1, Jan. 25, 1943).

January 22, 1943.—Organization within the Food Production Administration was announced. The Director was assisted by: An Associate Director, who served as Executive Officer; Associate Director of Food Production in charge of production loans; and a Deputy Director of Food Production in charge of programs. The Food Production Administration included: Agricultural Adjustment Agency, Farm Security Administration, Soil Conservation Service, Farm Credit Administration, and Federal Crop Insurance Corporation. The Food Production Administration had the following functional branches: Production Loan, Production Programs, Agricultural Manpower, Conservation Programs, Price Support and Loan Programs, Production Supplies Programs, and Distribution of Farm Supplies (Food Production Administration, Food Production Memo. 2, Jan. 22, 1943).

January 20, 1943.—Office of Special War Board Assistant to the Secretary was abolished, with all functions and responsibilities transferred to the Director of Food Production (Secretary's Memo. 1065, Jan. 20, 1943).

January 13, 1943.—Organization within the Food Distribution Administration was announced. The Director was assisted by four Deputy Directors. One Deputy Director supervised nine commodity branches: Cotton and Fiber, Dairy and Poultry, Fats and Oils, Fruits and Vegetables, Grain Products, Livestock and Meats, Special Commodities, Sugar, and Tobacco. A second supervised the Compliance Branch, Administrative Services Division, Budget Division, Fiscal Division, Marketing Reports Division, Organization and

Procedures Division, Program Analysis and Appraisal Branch, Transportation and Warehousing Branch, Personnel Division, and Program Liaison Division. A third Deputy supervised the following branches: Facilities, Processors, Wholesalers and Retailers, and Manpower. A fourth Deputy supervised three branches: Civilian Food Requirements, Civilian Programs, and Food Conservation. Requirements and Allocations Control reported directly to the Director (Food Distribution Administration, Director's Memo. 2, Jan. 13, 1943).

December 30, 1942.—Material Control Officer was designated for the Department (Secretary's Memo. 1057, Dec. 30, 1942).

December 5, 1942.—A Food Production Administration and a Food Distribution Administration were established within the Department of Agriculture. The Food Production Administration included: The Agricultural Conservation and Adjustment Administration, except the Sugar Agency; the Farm Credit Administration; the Farm Security Administration; part of the Office for Agricultural War Relations; some of the functions, personnel, and property transferred to the Department of Agriculture from the War Production Board. The Food Distribution Administration consolidated the: Agricultural Marketing Administration; Sugar Agency of the Agricultural Conservation and Adjustment Administration; regulatory activities of the Bureau of Animal Industry; food distribution activities of the Office for Agricultural War Relations; and food distribution activities transferred to the Department of Agriculture from the War Production Board (Executive Order 9280, 7 F.R. 10179).

November 2, 1942.—The Purchase Branch of the Agricultural Marketing Administration and its personnel and functions were transferred to other branches and divisions of the Administration. A Special Commodities Branch was established (Agricultural Marketing Administrator's Memo. 2, Supp. Q, Oct. 29, 1942).

September 15, 1942.—By this date the Division of War Board Services had been established in the Agricultural Adjustment Agency.

July 7, 1942.—The position of Assistant Administrator in charge of Requirements and Requisitions was established within the Agricultural Marketing Administration (AMA, Administrator's Memo. 3, Supp. M, July 7, 1942).

April 24, 1942.—The Program Appraisal Division was established within the Agricultural Marketing Administration (AMA, Administrator's Memo. 2, Supp. D, Apr. 24, 1942).

March 11, 1942.—The functions and personnel of the Marketing Division of the Surplus Marketing Administration were distributed among the commodity branches of the Agricultural Marketing Administration (AMA, Administrator's Memo. 2, Supp. B, Mar. 11, 1942).

March 9, 1942.—Organization within the Agricultural Marketing Administration was announced. The Administrator was assisted by two Associate Administrators and two Assistant Administrators. The divisions and branches of the former Agricultural Marketing Service, Surplus Marketing Administration, and Commodity Exchange Administration were assigned to new branches and divisions of the Agricultural Marketing Administration. The new organization had 11 branches: Purchase, Distribution, Commodity Exchange, Transportation and Warehousing, Dairy and Poultry, Cotton, Tobacco, Grain, Feed and Seed, Livestock, and Fruit and Vegetables. Management and auxiliary services were organized into six divisions (AMA, Administrator's Memo. 2, Mar. 9, 1942).

February 28, 1942.—The Consumers' Counsel Division was made a part of the Agricultural Marketing Administration (Secretary's Memo. 988, Supp. 1, Feb. 28, 1942).

February 23, 1942.—The Agricultural Marketing Administration and the Agricultural Conservation and Adjustment Administration were established by Executive order. The Agricultural Marketing Administration was formed by a consolidation of the Surplus Marketing Administration, including the

Federal Surplus Commodities Corporation as an agency of the Department of Agriculture; the Agricultural Marketing Service, except the Agricultural Statistics Division; and the Commodity Exchange Administration. The Agricultural Statistics Division of the Agricultural Marketing Service was transferred to the Bureau of Agricultural Economics. The Agricultural Conservation and Adjustment Administration was formed from a combination of the Agricultural Adjustment Administration, the Soil Conservation Service, the Federal Crop Insurance Corporation, and the Sugar Division of the Department of Agriculture (7 F.R. 1409). The Sugar Division became the Sugar Agency.

February 13, 1942.—The Consumers' Counsel Division was removed from the Agricultural Adjustment Administration and placed under the supervision of the Agricultural Marketing Administrator (Secretary's Memo. 988, Feb. 13, 1942).

January 12, 1942.—Titles of Administrator and Assistant Administrator of the Agricultural Adjustment Administration were changed to Chief and Assistant Chief. By March 1942, the name of the Agricultural Adjustment Administration had been changed to Agricultural Adjustment Agency (Secretary's Memo. 960, Supp. 2, Jan. 12, 1942).

December 15, 1941.—In a general reorganization of the Department of Agriculture, the Agricultural Adjustment Administration, the Soil Conservation Service, the Federal Crop Insurance Corporation, and the Sugar Division were grouped under the direction and supervision of an Agricultural Adjustment and Conservation Administrator. The Agricultural Marketing Service, except for the Division of Agricultural Statistics; the Commodity Exchange Administration; and the Surplus Marketing Administration were grouped together under the direction of an Agricultural Marketing Administrator. The Office of the Director of Marketing was abolished (Secretary's Memo. 960, Dec. 13, 1941).

June 30, 1941.—Insular Division had been discontinued. The Special Programs Division handled the programs for the Territories outside the United States (Administrator, Agricultural Adjustment Administration, *Report*, 1941, p. 90).

May 17, 1941.—Office of Agricultural Defense Relations was established in the Office of the Secretary. Establishment of this Office followed the transfer of the functions of the Division of Agriculture of the National Defense Advisory Commission to the Department of Agriculture (Secretary's Memo. 905, May 17, 1941).

February 1941.—A Purchase Division and a Distribution Division were organized to replace the Purchase and Distribution Division of the Surplus Marketing Administration (USDA Office of Personnel, Office of Administrative Management Records).

August 30, 1940.—The Surplus Marketing Administration had the following 12 divisions: Dairy, Fruit and Vegetable, Poultry, Marketing, Transportation, Purchase and Distribution, Field Investigations, Information, Audit, Personnel, Finance, and Business Management (Surplus Marketing Administration, Master Chart, Organization, Personnel Division, in USDA Office of Personnel, Office of Administrative Management Records).

June 30, 1940.—The Surplus Marketing Administration was established by consolidating the Division of Marketing and Marketing Agreements from the Agricultural Adjustment Administration with the Federal Surplus Commodities Corporation functions and personnel. The Corporation was continued as a corporate entity. The Administrator of the Surplus Marketing Administration also served as President of the Federal Surplus Commodities Corporation (Secretary's Memo. 871, June 29, 1940).

June 30, 1940.—The administration of the Insecticides Act and the Naval Stores Act was transferred from the Food and Drug Administration to the Agricultural Marketing Service (Secretary's Memo. 865, June 19, 1940).

April 12, 1940.—Management of the Commodity Credit Corporation was

vested in its President under the general direction of the Secretary of Agriculture (Secretary's Memo. 835, Supp. 1, Apr. 12, 1940).

1940.—During 1940, administration of programs for the Insular Regions became a part of the Division of Special Programs (Agricultural Adjustment Administration, *Agricultural Adjustment*, 1939–40, p. 17).

February 1, 1940.—The Consumers' Counsel Division of the Agricultural Adjustment Administration of the Department of Agriculture was placed under the general supervision and direction of the Director of Marketing. The Sugar Division was transferred to the Agricultural Adjustment Administration (Secretary's Memo. 849, Jan. 19, 1940).

January 19, 1940.—The position of Director of Marketing and Regulatory Work was changed to Director of Marketing (Secretary's Memo. 849, Jan. 19, 1940).

August 15, 1939.—President of the Commodity Credit Corporation was directed to function under the direction of, and be responsible to, the Secretary of Agriculture through the Director of Marketing and Regulatory Work. Vice President of the Corporation was to serve in the absence of the President (Secretary's Memo. 835, Aug. 15, 1939).

July 7, 1939.—The Agricultural Marketing Service was established pursuant to the provisions of the Department of Agriculture Appropriation Act for 1940 with units from the Bureau of Agricultural Economics including marketing research and regulatory activities in connection with cotton, dairy products, poultry products, fruits, vegetables, grain, livestock, meats, wool, hay, feed and seed, warehousing, tobacco, and market news. Also transferred from the Bureau of Agricultural Economics was the Division of Crop and Livestock Estimates, the name of which had been changed on July 1, 1939, to the Division of Agricultural Statistics. From the Bureau of Animal Industry the Administration of the Packers and Stockyards Act was transferred to the Agricultural Marketing Service. The responsibility for administering the Federal Seed Act was transferred from the Bureau of Plant Industry, and for administering the Dairy Products Export Act from the Bureau of Dairy Industry. The Director of Marketing and Regulatory Work continued to be responsible for coordinating the work of the Agricultural Marketing Service (Secretary's Memo. 830, July 7, 1939). The Agricultural Marketing Service was organized with a Chief, an Assistant Chief, 12 divisions—Packers and Stockyards; Warehousing; Agricultural Statistics; Cotton Marketing; Dairy and Poultry Products; Fruits and Vegetables; Livestock, Meats and Wool; Tobacco; Grain; Hay, Feed, and Seed; Enforcement of the Federal Seed Act; and Business Administration—and the Marketing Information Section (Agricultural Marketing Service, Mimeographed publication, The AMS, Organization and Functions, 95 pp., July 1939).

October 16, 1938.—A general reorganization of the Department of Agriculture removed from the Agricultural Adjustment Administrator responsibility for directing the work of the Program Planning Division, the Division of Marketing and Marketing Agreements, and the Sugar Section. The Program Planning Division was placed under the direction of the Chief of the Bureau of Agricultural Economics, who also carried, for a time, the designation of Associate Administrator of the Agricultural Adjustment Administration. The Division of Marketing and Marketing Agreements was assigned to the direction of the President of the Federal Surplus Commodities Corporation, who was designated Associate Administrator of the Agricultural Adjustment Administration. The Sugar Section of the Agricultural Adjustment Administration was called Sugar Administration in an October 6, 1938, memorandum, but its name was changed to Sugar Division effective October 15, 1938. A personal representative of the Secretary was appointed to have charge of marketing and regulatory activities and the Division of Crop and Livestock Estimates of the Bureau of Agricultural Economics, the Packers and Stockyards Act administered by the Bureau of Animal Industry, the Federal Seed Act administered by the Bureau of Plant Industry, and the Dairy Products Export Act administered by the Bureau of Dairy Industry.

The position of Director of Marketing and Regulatory Work was created and the Director was made responsible for coordinating the work of the Federal Surplus Commodities Corporation, the Commodity Exchange Administration, the Marketing and Marketing Agreements Division of the Agricultural Adjustment Administration, the Sugar Administration, and work of the Secretary's personal representatives in charge of marketing and regulatory activities and crop and livestock estimating and reporting (Secretary's Memos. 782 and 783, Oct. 6, 1938; and 783, Amend. 1, Oct. 15, 1938).

February 19, 1938.—The Under Secretary of Agriculture, the Assistant to the Secretary of Agriculture, and Assistant Administrator of the Agricultural Adjustment Administration were appointed to serve on the Board of Directors of the Federal Crop Insurance Corporation (3 F.R. 441).

January 1937.—An Assistant Administrator of the Agricultural Adjustment Administration served as President of the Federal Surplus Commodities Corporation (USDA Press Release 1220-39, Jan. 21, 1939).

March 17, 1936.—The commodity divisions of the Agricultural Adjustment Administration were replaced by five regional divisions: Southern, East Central, Northeast, North Central, and Western. The following divisions were continued: Marketing and Marketing Agreements, Program Planning, and Consumers' Counsel. The Sugar Section was continued (USDA Press Release 1564-36, Mar. 17, 1936). The Administration also had during 1936 an Insular Division, Division of Information, and a Division of Finance. The Director of the Division of Finance also served as treasurer of the Federal Surplus Commodities Corporation (Agricultural Adjustment Administration, *Agricultural Conservation, 1936*, p. 54).

November 18, 1935.—The charter of the Federal Surplus Relief Corporation was amended to change the name to Federal Surplus Commodities Corporation, and to change the membership of the Corporation so that it would consist of the Secretary of Agriculture, the Administrator of the Agricultural Adjustment Administration, and the Governor of the Farm Credit Administration. The Administrator of the Federal Emergency Relief Administration tendered his resignation as President of the Corporation and the Administrator of the Agricultural Adjustment Administration was elected to that post. These changes effected the transfer of direction of the Corporation from the Federal Emergency Relief Administration to the Department (Federal Surplus Commodities Corporation, *Report, 1935*).

February 5, 1935.—Reorganization of Agricultural Adjustment Administration announced. Legal Division was discontinued with its functions transferred to the Solicitor of the Department. Commodities Division divided into: Livestock Division; Cotton Division; Tobacco, Sugar, Peanuts, and Rice Division; Grain Division; and a Marketing Agreements and Licenses Division which included dairy, general crops, and field investigations. This Division was renamed the Division of Marketing and Marketing Agreements. Other divisions included Finance Division into which the Office of the Comptroller was transferred; Information; Consumers' Counsel; and Commodities Purchase, Agricultural Labor, Drought, and Other Emergency Programs. The last division was discontinued after a short period (USDA Press Release 1535-35, Feb. 5, 1935).

January 2, 1934.—Reorganization of Agricultural Adjustment Administration was announced. The Administrator was to be assisted by three Assistant Administrators who also served as heads of divisions. An Assistant Administrator headed the Commodities Division which had been formed by combining the Production Division with most of the Processing and Marketing Division. Commodity sections reported to this Division. An Assistant Administrator headed the Planning Division, later renamed Program Planning Division. The third Assistant Administrator was head of the Information Division. Consumers' Counsel Division became a part of the Division of Information and Records for a short period (USDA Press Release 1504-34, Jan. 2, 1934).

September 30, 1933.—Position of Coadministrator of the Agricultural Adjustment Administration was discontinued.

May-June 1933.—The Agricultural Adjustment Administration was organized pursuant to the approval of the Agricultural Adjustment Act of May 12, 1933. The Administration was directed by an Administrator assisted by a Coadministrator. The organization was built around two major program divisions: the Division of Production and the Division of Processing and Marketing. The program divisions were responsible for the work of commodity sections. Commodity sections for dairy, tobacco, rice and sugar, and special crops reported to both program divisions. Duplicate commodity sections were established for wheat, cotton, corn, and hogs. Other sections reporting to one of the program divisions included: Foreign Trade, Food Products, Fisheries, Alcoholic Beverages, Licensing and Enforcement, and Replacement Crops. In addition to the two major program divisions, the Administration had the following divisions: Consumers' Counsel, Information and Publicity, Finance, and General Counsel (Nourse, Davis, and Black, *Three Years of the Agricultural Adjustment Administration*, p. 55).

Office of Budget and Finance

The Office of Budget and Finance carries out departmental functions related to overall administration of the budgetary and financial affairs of the Department. The Office of Budget and Finance is directed by the Director of Finance and Budget Officer who reports to the Administrative Assistant Secretary. The Director is assisted by a Deputy Director and an Assistant Director. The Office of Budget and Finance has the following divisions: Accounting, Budgetary and Financial Reporting, Estimates and Allotments, Internal Audit, and Legislative Reporting.

December 8, 1961.—Certain functions formerly in the Office of Administrative Management were transferred to the Office of Budget and Finance (Secretary's Memo. 1477, Dec. 8, 1961).

January 7, 1957.—Certain management responsibilities were transferred to a new Office of Administrative Management (Secretary's Memo. 1409, Jan. 7, 1957).

January 30, 1956.—Division of Procurement and Property Management was transferred to the Office of Plant and Operations (Secretary's Memo. 1392, Jan. 19, 1956).

March 1, 1939.—The Technical Advisory Board became part of the newly established Office of Plant and Operations (Secretary's Memo. 809, Feb. 27, 1939).

July 10, 1934.—Technical Advisory Board established (Budget and Finance Circular 3, July 10, 1934).

June 1, 1934.—The Office of Budget and Finance was established, headed by a Director of Finance who continued to serve as Budget Officer of the Department. The new Office had the following divisions: Estimates and Reports; Accounts; Bureau Accounting Service; and Purchase Sales and Traffic (Secretary's Memo. 646, May 17, 1934).

April 7, 1925.—Office of Personnel and Business Administration was established. It was headed by a Director of Personnel and Business Administration. He was assisted by an Assistant Director who supervised the business administration and served as Budget Officer for the Department (Secretary's Memo. 530, Apr. 7, 1925).

Commodity Credit Corporation

The Commodity Credit Corporation provides financing for price support, supply and foreign purchase, storage facilities, commodity export, and special milk programs under authority of its charter and other legislation. The Corporation consists of a board of directors with the Secretary of Agriculture

serving as an ex-officio director and chairman of the board. The Corporation's operations are carried out through the personnel and facilities of the Agricultural Stabilization and Conservation Service and the Foreign Agricultural Service.

July 1, 1948.—The Commodity Credit Corporation Charter Act provided a permanent Federal charter (62 Stat. 1070).

August 20, 1945.—The Office of the President of the Commodity Credit Corporation was transferred to the Production and Marketing Administration (Secretary's Memo. 1118, Aug. 18, 1945).

March 26, 1943.—The Commodity Credit Corporation was one of the agencies included in the Food Production and Distribution Administration which was redesignated the War Food Administration on April 19, 1943 (Executive Order 9322, Mar. 26, 1943; 8 F.R. 3807 and Executive Order 9334, Apr. 19, 1943; 8 F.R. 5423).

July 1, 1939.—The Commodity Credit Corporation was transferred to the Department of Agriculture by the President's Reorganization Plan I.

October 17, 1933.—The Commodity Credit Corporation was organized, under the laws of the State of Delaware, as an agency of the United States (Executive Order 6340, Oct. 16, 1933).

Commodity Exchange Authority

The Administrator, reporting to the Assistant Secretary for Marketing and Stabilization, administers the Commodity Exchange Act regulating futures trading in specified commodities. The Administrator is assisted by a Deputy Administrator. Activities are carried on by the Compliance, Accounting and Licensing, and Trading Divisions.

February 1, 1947.—The Commodity Exchange Authority was established. The administration of the Commodity Exchange Act, as amended, was transferred from the Production and Marketing Administration (Secretary's Memo. 1185, Jan. 21, 1947).

August 20, 1945.—The administration of the Commodity Exchange Act was assigned to the Compliance and Investigation Branch of the Production and Marketing Administration (Secretary's Memo. 1118, Aug. 18, 1945).

February 23, 1942.—The Commodity Exchange Administration was consolidated in the Agricultural Marketing Administration (Executive Order 9069, Feb. 23, 1942). The Commodity Exchange Act was administered by the successor agencies until August 20, 1945, when it was assigned to the Production and Marketing Administration.

December 15, 1941.—The Commodity Exchange Administration was grouped with other agencies under an Agricultural Marketing Administrator (Secretary's Memo. 960, Dec. 13, 1941).

July 1, 1936.—The Commodity Exchange Administration was established to administer the Commodity Exchange Act. This act broadened the scope of regulation under the Grain Futures Act of 1922. The functions of the Grain Futures Administration were transferred to the new agency (Secretary's Memo. 700, June 30, 1936).

Cooperative State Experiment Station Service

Under the general direction of the Assistant Secretary, Federal-States Relations, the Administrator is responsible for the administration of Federal-grant funds by the State experiment stations and payments, under the Research and Marketing Act of 1946, to State experiment stations. The work is organized in the following areas: Economics and rural life, utilization and home economics, plant science, and animal science.

September 1, 1961.—The Cooperative State Experiment Station Service was established. It was assigned functions of the former State Experiment Stations Division directed by the Deputy Administrator, Experiment Stations, Agricultural Research Service (Secretary's Memo. 1462, Supp. 1, Aug. 30, 1961).

November 2, 1955.—The position of Deputy Administrator, Experiment Stations, replaced that of Assistant Administrator, Office of Experiment Stations (Secretary's Memo. to the Directors of Experiment Stations, Nov. 2, 1955).

January 2, 1954.—The position of the Chief of the Office of Experiment Stations as Assistant Administrator, Agricultural Research Administration, was redesignated as Assistant Administrator, Office of Experiment Stations (ARS Administrative Memo. 101.1, Dec. 28, 1953).

November 2, 1953.—The functions of the Office of Experiment Stations, then part of the Agricultural Research Administration, were transferred to the Agricultural Research Service (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953).

Economic Research Service

The Administrator, reporting to the Director, Agricultural Economics, is responsible for the economic research of the Department. He is assisted by the Deputy Administrator, Agricultural Economics, and the Deputy Administrator, Foreign Economics. Administrative services are furnished by the Management Operations Staff, which also reports to the Director, Agricultural Economics.

June 6, 1961.—The Administrator, Economic Research Service, announced divisional designations as approved: Economic and Statistical Analysis, Farm Economics, and Marketing Economics Divisions reporting to the Deputy Administrator, Agricultural Economics; and the Development and Trade Analysis and the Regional Analysis Divisions reporting to the Deputy Administrator, Foreign Economics (ERS General Memo. 2, June 6, 1961).

April 3, 1961.—The Economic Research Service was established and assigned the functions of: (1) The Agricultural Economics Division; the Market Development Research Division, except the Market Surveys Branch; the Marketing Economics Research Division; the Outlook and Situation Board; and some functions of the Transportation and Facilities Research Division—from the Agricultural Marketing Service; (2) the Farm Economics Research Division from the Agricultural Research Service; and (3) the Foreign Agricultural Analysis Division and International Monetary and Trade Analysis Branches of the Trade Policy Division of the Foreign Agricultural Service (Secretary's Memo. 1446, Supp. 1, Apr. 3, 1961). The functions transferred from the Agricultural Marketing Service and the Agricultural Research Service had been assigned to the Bureau of Agricultural Economics prior to the reorganization of 1953.

BUREAU OF AGRICULTURAL ECONOMICS

November 2, 1953.—The work of the Bureau of Agricultural Economics was reorganized and reassigned to the Agricultural Marketing Service and the Agricultural Research Service. Research on farm management and costs, land economics, and agricultural finance was transferred to the Agricultural Research Service. All research, analytical and statistical work, including crop and livestock estimates—except that reassigned to the Agricultural Research Service—was reassigned to the Agricultural Marketing Service (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953). When the Bureau was abolished it included the Divisions of Agricultural Finance, Farm Management and Costs, Land Economics, Statistical and Historical Research, Marketing and Transportation Research, Field Crop Statistics, Fruit and Vegetable Statistics, Livestock and Poultry Statistics, Dairy Statistics, Agricultural Price Statistics, Special Farm Statistics, Farm Population and Rural Life,

Special Surveys, Budget and Management Planning, Personnel and Administrative Services.

November 1, 1947.—The Division of Farm Population and Rural Welfare was redesignated the Division of Farm Population and Rural Life (Oris V. Wells to Assistant Chiefs, Division Heads, and others, Oct. 27, 1947).

August 1, 1946.—The Division of Program Surveys was abolished and most of its functions transferred to the Division of Special Surveys, established the same day (Clarence Barker to T. Roy Reid, Aug. 25, 1948).

July 1, 1946.—The Division of Agricultural Statistics was abolished and functions were assigned to six statistical divisions: Field Crop Statistics, Fruit and Vegetable Statistics, Livestock and Poultry Statistics, Dairy Statistics, Agricultural Price Statistics, and Special Farm Statistics (Memo. from Oris V. Wells to Assistant Chiefs and Division Heads, July 1, 1946).

June 30, 1946.—The Division of Program Study and Discussion was abolished (Memo. to Assistant Chiefs and Division Heads, June 24, 1946).

June 30, 1946.—The Division of Program Analysis and Development was abolished (Memo. to Assistant Chiefs and Division Heads, June 24, 1946).

June 30, 1946.—Regional Offices of the Bureau were abolished in accordance with provisions of the appropriation act (Memo. of the Chief of the Bureau to Assistant Chiefs and Division Heads, June 24, 1946).

December 31, 1945.—The Bureau of Agricultural Economics was given primary responsibility for agricultural statistics and economic research in the Department. Program planning responsibility was transferred to the Office of the Secretary. The fostering of public study and discussion groups was transferred to Extension Service. The Secretary authorized the appointment of an Associate Chief and four Assistant Chiefs of the Bureau, responsible for particular fields of work within the Bureau (Secretary's Memo. 1139, Dec. 12, 1945).

July 1, 1942.—The work of the Agricultural Planning Field Service was discontinued in accordance with the appropriation act (56 Stat. 673).

February 26, 1942.—The Division of State and Local Planning was renamed the Agricultural Planning Field Service.

February 23, 1942.—The Division of Agricultural Statistics was transferred from the Agricultural Marketing Service to the Bureau of Agricultural Economics (Executive Order 9069; Secretary's Memo. 960, Dec. 13, 1941).

June 26, 1941.—The Division of Program Development and Coordination was redesignated the Division of Program Analysis and Development (Memo. to Division Leaders, June 26, 1941).

July 7, 1939.—The Division of Agricultural Statistics was transferred to the Agricultural Marketing Service (Secretary's Memo. 830, July 7, 1939).

July 1, 1939.—The Division of Program Study and Discussion was transferred from the Agricultural Adjustment Administration to the Bureau of Agricultural Economics (Carl Taeusch to Eric Englund, June 12, 1940).

July 1, 1939.—The Divisions of Marketing and Transportation Research were combined to form the Division of Marketing and Transportation Research.

June 29, 1939.—The name of the Division of Rural Attitudes and Opinions had been changed to Division of Program Surveys (H. R. Tolley to Roy F. Hendrickson, June 29, 1939).

May 19, 1939.—Recommendation of proposal to merge the Divisions of Marketing Research and Marketing Transportation in the Marketing and Transportation Research Division was approved (Roy Hendrickson to H. R. Tolley, May 29, 1939).

April 16, 1939.—The Tobacco Section was renamed the Tobacco Division (BAE Administrative Memo. 158, Apr. 14, 1939).

1939.—The Division of State and Local Planning was established, early in the year, to continue studies begun in the Program Planning Division of the Agricultural Adjustment Administration.

1939.—The Division of Farm Population and Rural Life was redesignated the Division of Farm Population and Rural Welfare.

December 1, 1938.—The Foreign Agricultural Service Division was transferred to and became a part of the Office of the Secretary (Secretary's unnumbered Memo., Nov. 30, 1938).

November 1, 1938.—Functions of the Land Acquisition, Land Development, Land Utilization, and Project Organization Divisions were transferred to the Soil Conservation Service (Secretary's Memos. 785 and 790, Oct. 6 and 20, 1938).

October 16, 1938.—The Bureau of Agricultural Economics was reconstituted as the central program planning and economic research agency for the Department (Secretary's Memo. 782, Oct. 6, 1938).

October 6, 1938.—In accordance with Secretary's Memorandum 783, the agricultural estimating, marketing research, and the service and regulatory activities were placed under the direction of a representative of the Secretary of Agriculture. They became part of the Agricultural Marketing Service when it was formally established on July 7, 1939 (Secretary's Memo. 830, July 7, 1939).

July 1, 1938.—The Division of Transportation was established (BAE Administrative Memo. 84, from C. W. Kitchen to Division Leaders, July 1, 1938).

1938.—The Division of Program Development and Coordination was established.

September 1, 1937.—The Secretary authorized the Chief of the Bureau of Agricultural Economics to appoint an Assistant Chief of the Bureau for Land Utilization to direct the work being transferred to the Bureau from the Farm Security Administration. The work was organized later in the Land Acquisition and Land Classification Divisions and the Division of Project Organization. To facilitate work in the field, regional offices were established (Secretary's Memo. 733, Sept. 1, 1937; *BAE News*, Sept. 15, 1937).

January 18, 1935.—The establishment of the Division of Marketing Research was announced (USDA Press Release 1402-35, Jan. 18, 1935).

May 9, 1930.—The establishment of the Foreign Agricultural Service Division was announced. This action was formally authorized in the appropriation act for the next fiscal year (Nils Olsen to Division Leaders, May 9, 1930; 46 Stat. 497).

October 1, 1929.—The Division of Cooperative Marketing was transferred to the Federal Farm Board (Executive Order 5200).

July 2, 1926.—The Division of Cooperative Marketing was established. The functions of the Division of Agricultural Cooperation were transferred to it (44 Stat. 802).

March 21, 1925.—The announcement was made that the Cost of Marketing Division would be administratively dissolved (Unsigned Memo. to Division Leaders, Mar. 23, 1925).

July 1, 1924.—The Divisions of Farm Management and Cost of Production were merged to form the Division of Farm Management and Costs.

July 1, 1922.—The Bureau of Markets and Crop Estimates was combined with the Office of Farm Management and Farm Economics to form the Bureau of Agricultural Economics. The work was organized in the following divisions: Farm Management; Cost of Production; Crop and Livestock Estimates; Livestock, Meats, and Wool; Grain; Fruits and Vegetables; Hay, Feed, and Seed; Dairy and Poultry Products; Warehousing; City Markets; Cost of Marketing; Agricultural Finance; Land Economics; Statistical and Historical Research; Farm Population and Rural Life; Agricultural Cooperation; and Information (42 Stat. 531).

BUREAU OF MARKETS AND CROP ESTIMATES

July 1, 1922.—The Bureau of Markets and Crop Estimates was combined with the Office of Farm Management and Farm Economics to form the Bureau of Agricultural Economics.

July 1, 1921.—The Bureau of Crop Estimates was merged with the Bureau of Markets to form the Bureau of Markets and Crop Estimates. The commodity divisions of the Bureau of Markets were continued. New divisions established included the Division of Crop and Livestock Estimating, the Division of Information, and the Division of Cooperative Relations (41 Stat. 1341).

BUREAU OF MARKETS

July 1, 1921.—The Bureau of Markets was combined with the Bureau of Crop Estimates to form the Bureau of Markets and Crop Estimates.

1919-20.—During the fiscal year, most of the projects of the Bureau of Markets were grouped in the following divisions: Livestock, Meats, and Wool; Dairy and Poultry Products; Fruits and Vegetables; Grain Marketing; Hay, Feed and Seed; and Warehousing.

July 7, 1919.—The Division of Cotton Marketing was established.

July 1, 1917.—The Office of Markets and Rural Organization was redesignated the Bureau of Markets (39 Stat. 1162).

July 1, 1915.—The Office of Markets was formally merged with the Rural Organization Service, forming the Office of Markets and Rural Organization (38 Stat. 1111).

May 16, 1913.—The Office of Markets was established. The work was organized in projects or investigations.

May 1, 1913.—T. N. Carver was appointed as collaborator to organize the work of the Rural Organization Service.

OFFICE OF FARM MANAGEMENT AND FARM ECONOMICS

July 1, 1922.—The Office of Farm Management and Farm Economics was combined with the Bureau of Markets and Crop Estimates to form the Bureau of Agricultural Economics (42 Stat. 531).

July 1, 1920.—The Office of Farm Management and Farm Economics became independent of the Office of the Secretary.

July 1, 1919.—The Office of Farm Management was redesignated the Office of Farm Management and Farm Economics. The research was divided in the following sections: Farm organization, cost of production, farm labor, farm finance, land economics, agricultural history and geography, and rural life studies.

July 1, 1915.—The Office of Farm Management was transferred from the Bureau of Plant Industry to the Office of the Secretary (38 Stat. 1087).

1905.—The Office of Farm Management was established in the Bureau of Plant Industry.

Farmer Cooperative Service

The Administrator, reporting to the Assistant Secretary for Federal-States Relations, directs the research and technical assistance work for farmers' marketing, purchasing, and service cooperatives, under the Cooperative Marketing Act of 1926. The Service consists of the Administrative Management, Information, Management Services, Marketing, and Purchasing Divisions.

December 8, 1953.—Under the plan of organization, approved by the Secretary, three program divisions were established (T. Roy Reid to Joseph G. Knapp, Dec. 10, 1953).

December 4, 1953.—The Cooperative Research and Service Division, formerly a part of Farm Credit Administration, became Farmer Cooperative Service. Under provisions of the Farm Credit Act of 1953, the Division remained in the Department of Agriculture when the remainder of the Administration became an independent agency.

October 1, 1929.—The Division of Cooperative Marketing was transferred from the Bureau of Agricultural Economics of the Department of Agriculture to the Federal Farm Board. Subsequently, on May 27, 1933, the Farm Credit Administration was created to administer functions of the Board not concerned with price stabilization (Executive Order 6084, Mar. 27, 1933).

July 2, 1926.—The Cooperative Marketing Division was created in the Bureau of Agricultural Economics by the Cooperative Marketing Act. Functions of the former Division of Agricultural Cooperation were transferred to the new division (44 Stat. 802).

Farmers Home Administration

The Administrator, reporting to the Director, Agricultural Credit, is responsible for the direction of activities relating to farmownership, farm operating, soil and water conservation, farm housing, emergency, and watershed and flood prevention loans; technical guidance to borrowers in planning and carrying out sound farm operations; and coordinating technical services of the Department in the rural areas development program. The Administrator is assisted by a Deputy Administrator and Assistant Administrators for Operating Loans, Real Estate Loans, and Management. The Assistant Administrator for Operating Loans directs the work of the Operating Loan, Emergency Loan, and Rural Renewal Divisions. The Assistant Administrator for Real Estate Loans directs the work of the Farm Ownership Loan, Rural Housing Loan, and Soil and Water Loan Divisions. The Assistant Administrator for Management directs the work of the National Finance Office in St. Louis and the Budget, Personnel, and Business Services Divisions.

December 18, 1953.—Loan functions were under the direction of one division—the Loan Division.

November 2, 1953.—The Farmers Home Administration was grouped with other credit agencies of the Department.

August 14, 1946.—The Farmers Home Administration was established to administer functions of the Farm Security Administration. Actual transfer became effective November 1, 1946 (Secretary's Memos. 1171 and 1171, Supp. 1, Aug. 19, 1946, Oct. 14, 1946). Loan operations were conducted by the Farm Ownership and Production Loan Divisions.

1941.—Program divisions included: Labor, Resettlement, Rural Rehabilitation, and Tenant Purchase.

September 1, 1937.—The Resettlement Administration was renamed the Farm Security Administration. The Secretary directed that functions relating to the land utilization program be transferred to the Bureau of Agricultural Economics (Secretary's Memo. 732, Sept. 1, 1937). Subsequently, program divisions included: Construction, Inspection, Investigations, Labor Relations, Resettlement, Rural Rehabilitation, Suburban Resettlement, and Tenant Purchase.

January 1, 1937.—The Resettlement Administration was transferred to the Department of Agriculture by Executive Order 7530. Program divisions included: Land Utilization, Suburban Resettlement, Special Skills, Management, Special Plans, Resettlement, Rehabilitation, Labor Relations, Construction, and Inspection.

Federal Crop Insurance Corporation

The Federal Crop Insurance Corporation is responsible for the development and administration of crop insurance programs to protect farmers against crop losses from causes beyond their control. The Corporation consists of a Board of Directors, headed by the Assistant Secretary for Agricultural Marketing and Stabilization and the Manager who is assisted by a Deputy Manager,

an Internal Audit Staff and the following divisions: Actuarial, Administrative, Budget and Finance, Claims Management, Program Development and Research, and Sales Management.

November 2, 1953.—The Federal Crop Insurance Corporation was included under the Agricultural Stabilization group of Department agencies (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953). It had been, since January 21, 1953, included in a grouping of Department agencies designated as Commodity Marketing and Adjustment (Secretary's Memo. 1320, Supp. 4, Jan. 21, 1953).

July 1, 1947.—The Federal Crop Insurance Corporation was transferred out of the Production and Marketing Administration and reestablished as a separate agency (Secretary's Memo. 1196, June 26, 1947).

August 20, 1945.—The Offices of the Manager and of the Secretary of the Federal Crop Insurance Corporation were transferred to the Production and Marketing Administration (Secretary's Memo. 1118, Aug. 18, 1945).

January 1, 1945.—The Federal Crop Insurance Corporation was reinstated as an independent agency within the War Food Administration (WFA, Administrator's Memo. 27, Rev. 1, Dec. 13, 1944).

December 5, 1942.—The Federal Crop Insurance Corporation became a part of the Food Production Administration (Executive Order 9280, 7 F.R. 10179).

February 23, 1942.—The Federal Crop Insurance Corporation became part of the Agricultural Conservation and Adjustment Administration (7 F.R. 1409). Since December 15, 1941, it had been grouped with other agencies under the direction and supervision of an Agricultural Adjustment and Conservation Administrator (Secretary's Memo. 960, Dec. 13, 1941).

February 16, 1938.—The Federal Crop Insurance Corporation was created as an agency of and within the U.S. Department of Agriculture by Title V of the Agricultural Adjustment Act of 1938 (52 Stat. 31).

Federal Extension Service

The Administrator, reporting to the Assistant Secretary for Federal-States Relations, is responsible for a nationwide system of cooperative State extension work. He is directly assisted by a Deputy Administrator and by two Assistant Administrators. The Service includes the Divisions of Management Services, Home Economics Programs, 4-H and YMW Programs, Extension Research and Training, Information Programs, and Agricultural Economics Programs.

December 8, 1953.—The title of the Director of Extension Work was changed to Administrator, Federal Extension Service. The positions of Deputy and Assistant Administrator were established. The title of the Division of Agricultural Economics was changed to Division of Agricultural Economics Programs, the Division of Information to Division of Information Programs, the Division of Field Studies and Training to Division of Extension Research and Training, and Division of Business Administration to Division of Management Operations (T. Roy Reid to C. M. Ferguson, Dec. 9, 1953).

December 1, 1952.—The Divisions of Field Coordination and Subject Matter were consolidated and reconstituted as the Divisions of 4-H Club and YMW Programs, Home Economics Programs, and Agricultural Programs (P. V. Kepner to Extension Staff Members, Dec. 1, 1952).

June 11, 1948.—The Division of Agricultural Economics was established by transfer of functions from the Division of Subject Matter (Organization Chart, June 11, 1948).

December 31, 1947.—When the authority of the Department of Agriculture for the farm labor program expired and the function reverted to the Department of Labor, the Recruitment and Placement, the Victory Farm Workers, and the Labor Utilization Divisions ceased operations.

1945.—At the end of the year the Women's Land Army Division was discontinued and remaining functions were transferred to the Recruitment and Placement Division.

February 19, 1945.—The Labor Utilization Division was established and the Placement and Intrastate Recruitment Division became the Recruitment and Placement Division (Organization Chart, Feb. 19, 1945).

May 20, 1943.—The Women's Land Army, the Victory Farm Volunteers, and the Placement and Intrastate Recruitment units were redesignated as divisions (Organization Chart, May 20, 1943).

July 1, 1942.—The motion picture and exhibit work was transferred from the Extension Service to the Office of Information under authority of the appropriation act.

January 2, 1941.—The Surveys and Reports Section was separated from the Division of Field Coordination and redesignated as the Division of Field Studies and Training (Extension Service Memo. A-79, Dec. 27, 1940).

February 1, 1939.—The Federal Extension Service was reorganized. The new organization included the Divisions of Subject Matter, Field Coordination, and Extension Information. Previously, the work had been assigned to the Division of Motion Pictures, the Division of Exhibits, and the Division of Cooperative Extension Work which had been organized with four regional agents (Extension Service Memo. A-1, Jan. 26, 1939).

July 1, 1934.—The Offices of Cooperative Extension Work, Motion Pictures, and Exhibits were redesignated as Divisions.

1928.—The Office of Agricultural Instruction was consolidated in the Office of Cooperative Extension Work.

January 15, 1926.—The Office of Agricultural Instruction was transferred from the Office of the Secretary.

August 16, 1924.—The Office of Demonstrations on Reclamation Projects was transferred from the Bureau of Plant Industry.

July 1, 1923.—The Office of the Director of Extension Work and the Extension Service were established. The Office of Cooperative Extension Work, the Office of Motion Pictures, and the Office of Exhibits were transferred to the new Office (Secretary's Memo. 436, June 8, 1923).

July 1, 1915.—The Office of Extension Work in the South and the Office of Extension Work in the North and West became units of the States Relations Service.

May 8, 1914.—The Smith-Lever Act was approved providing for cooperative administration of extension work by the Department of Agriculture and the State agricultural colleges. The work was divided on geographical lines—the South and the North and West.

Foreign Agricultural Service

The Administrator, reporting to the Under Secretary, is responsible for promoting the export of United States farm products and for representing the Department and United States agriculture abroad. The Administrator is assisted by an Associate Administrator with Assistant Administrators for Export Programs and Commodity Programs; and a Deputy Administrator for Operations with Assistant Administrators for Agricultural Attachés, International Affairs, and Management.

The Administrator is directly assisted by a Deputy Administrator for Operations, a Deputy Administrator for Programs, a Barter and Stockpiling Manager, and a General Sales Manager. The Deputy Administrator for Operations is assisted by Assistant Administrators for Management, Agricultural Attachés, and International Affairs. The Assistant Administrator for Management directs the work of the Foreign Market Information, Administrative Services, Personnel, and Budget and Finance Divisions. The Assistant Administrator for Agricultural Attachés directs the activities of area offices and overseas posts. The Assistant Administrator for International Affairs directs the work of the International Projects and Import Staffs and the International Organizations, Trade Policy, and Foreign Training Divisions.

The Deputy Administrator for Programs is assisted by Assistant Administrators for Export and Commodity Programs. The Assistant Administrator for Export Programs directs the work of the Program Development, Trade Projects, International Trade Fairs, and Program Operations Divisions. The Assistant Administrator for Commodity Programs directs the work of the Grain and Feed, Fats and Oils, Cotton, Dairy and Poultry, Fruit and Vegetable, Tobacco, Livestock and Meat Products, and Sugar and Tropical Products Divisions.

May 25, 1961.—The Import Division was replaced by the Import Staff and the International Organizations Division was established (Organization Chart, May 25, 1961).

April 3, 1961.—The functions of the Foreign Agricultural Analysis Division and part of those of the Trade Policy Division were transferred to the Economic Research Service (Secretary's Memo. 1446, Supp. 1, Apr. 3, 1961).

June 24, 1958.—The Foreign Trade Programs Division was abolished. The Program Development, Program Operations, and Foreign Trade Promotion Divisions were established (FAS Operations Memo. 9, Amend. 7, June 24, 1958).

January 3, 1956.—The establishment of the Foreign Trade Policy Division and an Import Division was approved (MacHenry Schafer to Gwynn Garnett, Jan. 5, 1956).

June 29, 1955.—The establishment of the Import and Trade Policy Divisions was announced (FAS Operations Memo. 9, June 29, 1955).

May 16, 1955.—The establishment of the Dairy and Poultry Division and the redesignation of the Livestock and Livestock Products Division as the Livestock and Meat Products Division were approved (MacHenry Schafer to Gwynn Garnett, May 18, 1955; FAS Operations Memo. 8, May 12, 1955).

September 1, 1954.—Jurisdiction over United States agricultural attachés was returned to the Department of Agriculture (68 Stat. 897).

July 14, 1954.—The establishment of the Sugar and Tropical Products and Tobacco Divisions in lieu of the Tobacco and Tropical Products Division was approved (MacHenry Schafer to William G. Lodwick, July 15, 1954).

November 12, 1953.—The organization of the Foreign Agricultural Service was approved. Assistant Administrators were appointed for Foreign Service and Trade Programs, Market Development, and Management. Program Divisions included Foreign Service, Trade Programs, Foreign Training, Cotton and Fiber, Grain and Feed, Tobacco and Tropical Products, Livestock and Livestock Products, Fats and Oils, Fruit and Vegetable, and Foreign Market Information (Organization Chart, Nov. 12, 1953).

March 10, 1953.—The Foreign Agricultural Service was established to carry on the work of the Office of Foreign Agricultural Relations (Secretary's Memo. 1320, Supp. 1, Mar. 10, 1953).

January 14, 1953.—The establishment of the Foreign Agricultural Analysis Division and the redesignation of the Trade Programs Division as the Foreign Trade Programs Division were approved (T. Roy Reid to Clayton E. Whipple, Jan. 15, 1953).

April 12, 1951.—The reestablishment of the Agricultural Machinery and Supplies Division was announced (USDA Press Release 922-51).

February 5, 1951.—The reorganization of the Technical Collaboration Branch was approved. The Technical Development Division was redesignated the Research Division, and the Operation Division, the Program Management Division. The Extension and Education and Training Divisions were combined into the Extension, Education, and Training Division (T. Roy Reid to Stanley Andrews, Feb. 5, 1951).

June 21, 1950.—The reorganization of the Technical Collaboration Branch to include the Technical Development, Operation, Extension, and Education and Training Divisions was approved (T. Roy Reid to Stanley Andrews, June 21, 1950).

January 5, 1950.—The establishment of the Agricultural Production and Development Division in lieu of the Complementary Crops Division in the Technical Collaboration Branch was approved (N. R. Bear to Stanley Andrews, Jan. 5, 1950).

October 14, 1948.—The reorganization of the Regional Investigations Branch was approved. The Western Europe and Africa Division and the Middle East and Eastern Europe Division were created in lieu of the Europe, Soviet Union, and Middle East Division. The International Economics Studies Division was redesignated Foreign Agricultural Trade and Policies Division (James L. Buckley to D. A. FitzGerald, Oct. 14, 1948).

August 6, 1948.—The establishment of the Agricultural Machinery and Supplies Division in the International Commodities Branch was approved (T. Roy Reid to D. A. FitzGerald, Aug. 6, 1948).

July 1, 1948.—The redesignation of the Division of Foreign Information and Statistics as the Division of Foreign Information was approved (N. R. Bear to Fred J. Rossiter, July 1, 1948).

December 12, 1945.—The reorganization of the International Commodities Branch was approved. The Agricultural Machinery and Fertilizer Divisions were abolished. Cotton; Grain and Feed; Livestock and Wool; Fats, Oils, and Rice; Tobacco and Tropical Products; and Fruits, Vegetables, and Sugar Divisions continued (T. Roy Reid to L. A. Wheeler, Dec. 12, 1945).

November 6, 1945.—The organization of the Regional Investigations Branch, including the Latin American Division; United Kingdom and Dominions Division; Europe, Soviet Union, and Middle East Division; and the Far East Division was approved (T. Roy Reid to L. A. Wheeler, Nov. 6, 1945).

October 4, 1944.—The Regional Investigations Branch included the Western Hemisphere; Far East, Europe, and Africa; and the International Economic Studies Divisions (Organization Chart, Oct. 4, 1944).

March 29, 1944.—The establishment of the Technical Collaboration Branch in lieu of the Latin American Division was approved. It included the Complementary Crops, Station Management, and Extension and Training Divisions (T. Roy Reid to L. A. Wheeler, Mar. 29, 1944).

August 25, 1943.—The International Commodities Branch had the following divisions: Vegetable Fibers, Tropical Products and Tobacco, Agricultural Machinery, Fruits and Vegetables, Fertilizer, Livestock Products, Sugar and Seeds, and Vegetable Oils and Cereals (Organization Chart, Aug. 25, 1943).

March 3, 1943.—The establishment of the Division of Foreign Information and Statistics was approved (James L. Buckley to C. E. Michelson, Mar. 3, 1943).

August 30, 1940.—The Office of Foreign Agricultural Relations included the Divisions of Foreign Agricultural Research, Special Latin American Investigations, and Foreign Crops and Markets (Organization Chart, Aug. 30, 1940).

August 24, 1940.—Approval was granted for the redesignation of the Division of Foreign Agriculture and Agricultural Policies to Division of Foreign Agricultural Research (Roy F. Hendrickson to L. A. Wheeler, Aug. 24, 1940).

July 1, 1939.—The Office of Foreign Agricultural Relations was established to carry on the functions of the Foreign Agricultural Service, remaining in the Department (Secretary's Memo. 825, June 30, 1939).

July 1, 1939.—Jurisdiction over United States agricultural attachés was transferred to the State Department (Reorganization Plan II).

December 1, 1938.—The Foreign Agriculture Service was established. The Divisions of Foreign Agriculture and Agricultural Policies and of Foreign Crops and Markets were soon formed (Secretary's unnumbered Memo., Nov. 30, 1938). The work had formerly been carried on in the Bureau of Agricultural Economics.

Forest Service

The Chief of the Forest Service, reporting to the Assistant Secretary for Federal-States Relations, is responsible for conservation and development of the Nation's forest resources, and for research aimed at supporting such conservation and development. He is assisted by Assistant Chiefs for Administration, Forest Research, National Forest Protection and Development, National Forest Resource Management, Program Planning and Legislation, and State and Private Forestry. The Assistant Chief, Administration, directs the work of the Divisions of Administrative Management, Administrative Services, Budget and Finance, Information and Education, and Personnel Management. The Assistant Chief, Forest Research, directs the work of the Divisions of Forest Disease Research, Forest Economics Research, Forest Fire Research, Forest Insect Research, Forest Management Research, Range Management Research, Watershed Management Research, Forest Products and Engineering Research, and Foreign Forestry Services. The Assistant Chief, National Forest Protection and Development, directs the work of the Divisions of Engineering, Fire Control, Land Adjustments, and Land Classification. The Assistant Chief, National Forest Resource Management, directs the work of the Divisions of Range Management, Recreation and Land Uses, Timber Management, Watershed Management, and Wildlife Management. The Assistant Chief, Program Planning and Legislation, directs the work of the Division of Legislative Reporting and Liaison and the Division of Program Planning and Special Projects. The Assistant Chief, State and Private Forestry, directs the work of the Divisions of Cooperative Forest Fire Control, Cooperative Forest Management, Cooperative Tree Planting, Flood Prevention and River Basin Programs, and Forest Pest Control.

August 9, 1961.—The change in designation of the Division of Forest Products Utilization Research to Forest Products and Engineering Research and the Division of Range Management and Wildlife Habitat Research to Range, Wildlife Habitat, and Recreation Research was approved (J. P. Loftus to R. E. McArdle, Aug. 9, 1961).

June 30, 1958.—The change of designation of the Division of Forest Products Research to Forest Products Utilization Research and the Division of Range Management Research to Range Management and Wildlife Habitat Research was approved (J. P. Loftus to R. E. McArdle, June 30, 1958).

August 2, 1957.—The establishment of the Division of Program Planning and Special Projects and the Division of Legislative Reporting and Liaison was approved (J. P. Loftus to Clare Hendee, Aug. 2, 1957).

May 22, 1957.—The abolition of the Division of Forest Land Planning, the establishment of the Division of Land Classification, and the redesignation of the Division of Lands as the Division of Land Adjustments was approved (J. P. Loftus to Clare Hendee, May 22, 1957).

July 11, 1956.—The consolidation of the Divisions of Lands and Land Utilization in the Division of Lands was approved (James L. Buckley to R. E. McArdle, July 11, 1956).

June 14, 1956.—The establishment of the Division of Cooperative Tree Planting was approved (James L. Buckley to R. E. McArdle, June 14, 1956).

April 13, 1956.—The abolition of the Division of White Pine Blister Rust Control and the inclusion of its functions in the newly established Division of Forest Pest Control was approved (S. B. Herrell to R. E. McArdle, Apr. 13, 1956).

July 19, 1954.—The establishment of the Division of Flood Prevention and River Basin Programs and the Division of Land Utilization was approved. The following redesignations were approved: Division of Recreation and Lands to Recreation and Land Uses, Division of Land Acquisition to Lands, Division of Forest Management to Forest Management Research, Division of Range Research to Range Management Research, Division of Forest Products to Forest Products Research, Division of Forest Economics to Forest

Economics Research, and Division of Forest Influences to Division of Watershed Management Research. Division of Forest Communities was dropped (MacHenry Schafer to R. E. McArdle, July 21, 1954; Organization Chart).

Following Reorganization Plan II, effective November 2, 1953, employees of the Bureau of Entomology working on blister rust control had been transferred to Forest Service where the Division of White Pine Blister Rust Control was established.

March 17, 1954.—The establishment of the Divisions of Forest Insect Research and Forest Disease, the elimination of the Division of Dendrology and Range Forage Investigation, and the change in designation of the Division of Forest Influences to Division of Watershed Management Research were approved (James Buckley to R. E. McArdle, Mar. 17, 1954).

August 4, 1948.—The establishment of the Division of Forest Fire Research was approved (T. Roy Reid to Lyle Watts, Aug. 4, 1948).

June 11, 1946.—The consolidation of the Divisions of State Forestry and Private Forestry in the Division of Cooperative Forest Management was approved (James L. Buckley to Lyle F. Watts, June 11, 1946).

September 1, 1945.—The Division of State Cooperation was redesignated the Division of State Cooperative Fire Control (Organization Chart, Sept. 1, 1945).

April 1, 1946.—The Forest Service had the following divisions: Fire Control, Timber Management, Range Management, Wildlife Management, Watershed Management, Recreation and Lands, Engineering, Forest Land Planning, Land Acquisition, Private Forestry, State Cooperative Fire Control, State Forestry, Forest Management Research, Range Research, Forest Products, Forest Economics, and Forest Influences (*Directory*, Forest Service, Apr. 1, 1946).

June 20, 1945.—The cooperative farm forestry program was transferred from the Soil Conservation Service to the Forest Service (General Departmental Circular 67, June 20, 1945).

August 1, 1942.—The Division of Dendrology and Forage Investigations was established.

May 18, 1937.—The Norris-Doxey Cooperative Farm Forestry Act increased technical aid available to farmowners on sound management of woodlands.

June 10, 1935.—The reorganization of the Forest Service was announced. The work was grouped under broad subject headings—State and Private Forestry, Research, and National Forests. State and Private Forestry included the Divisions of State Cooperation, Forest Code, and Purchase and Regulation; Research included the Divisions of Silvics, Forest Economics, Range Research, and Forest Products; and National Forests consisted of the Divisions of Fire Control and Improvement, Timber Management, Range Management, Recreation and Lands, and Engineering. The former Division of Operations was succeeded by the Division of Fire Control and Improvement, the Division of Forest Management was redesignated the Division of Timber Management, and the Division of Lands became the Division of Recreation and Lands (*Forest Service Bulletin*, June 10, 1935).

July 1, 1934.—The Southern National Forest Region was created from the Eastern Region.

May 19, 1934.—In accordance with Secretary's Memorandum 645, April 24, 1934, the Forest Service announced the following divisions: Research, Engineering, Public Relations, Forest Management, Wildlife and Range Management, Operations, and Lands (F. A. Silcox to the Secretary, May 19, 1934).

May 15, 1930.—The Secretary of Agriculture approved the change in designation from "District" and "District Forester" to "Region" and "Regional Forester."

1929.—The North-Central District was established at Milwaukee, Wis.

1928.—The McSweeney-McNary Act authorized a program of forest research, the basis for the present research organization.

1921.—The Alaska District was established with headquarters at Juneau.

1914.—The Eastern National Forest District was established with headquarters in Washington, D.C., later moved to Philadelphia, Pa.

1910.—Forest Products Laboratory at Madison, Wis., was established in cooperation with the University of Wisconsin.

December 1, 1908.—The new policy of decentralization of National Forest administration laid the basis for the present regional organization of the Forest Service. Six districts were set up.

1908.—The first forest experiment station was established on the Coconino Plateau in Arizona.

July 1, 1905.—The Bureau of Forestry was redesignated the Forest Service.

July 1, 1901.—The Division of Forestry became the Bureau of Forestry (31 Stat. 929).

1881.—The forest agency became the Division of Forestry.

Office of the General Counsel

The General Counsel is the chief law officer of the Department. He is assisted by a Deputy General Counsel and three Assistant General Counsels. The Office includes the Farmers Home, REA Loans, REA Operations, Commodity Credit, Production Adjustment, General Regulatory, and Marketing Divisions.

March 17, 1955.—The Solicitor of the Department was redesignated the General Counsel and the Office of the Solicitor became the Office of the General Counsel (Secretary's Memo. 1374, Mar. 17, 1955).

July 1, 1941.—The legal work of the Rural Electrification Administration and the Farm Credit Administration was placed under the supervision and direction of the Solicitor of the Department (Secretary's Memo. 924, July 1, 1941).

January 4, 1937.—The responsibility for the legal work of the Resettlement Administration was assigned to the Solicitor of the Department of Agriculture (Secretary's Memo. 707, Jan. 4, 1937).

February 9, 1935.—The legal work of the Agricultural Adjustment Administration was transferred to the Office of the Solicitor (Secretary's Memo. 658, Feb. 9, 1935).

July 1, 1910.—In accordance with an appropriation act (36 Stat. 416) the Secretary directed that all legal work of the Department be performed under the supervision and direction of the Solicitor (General Order 140, June 9, 1910).

July 1, 1905.—A solicitor was appointed to have responsibility for legal work of the Department (General Order 85, June 17, 1905).

Office of Hearing Examiners

The Office of Hearing Examiners, established December 9, 1946, is responsible for holding hearings when called on to do so by administrative agencies of the Department. The Office is headed by a Chief.

Office of Information

The Office of Information determines policies and procedures for information work of the Department. The Assistant Director for Current Information supervises the Press Service, the Radio and Television Service, and the Special Reports Division. The Assistant Director for Publications supervises the Division of Publications. The Assistant Director for Visual Information supervises the Motion Picture Service, Art and Graphics Division, Division of Photography, and Exhibits Service. The Administrative Management Division reports to the Office of the Director.

March 26, 1954.—Photographic and art and graphic work was centralized in the Office of Information (Secretary's Memo. 1348, Mar. 26, 1954).

December 10, 1942.—The Director of Information was given responsibility for directing, integrating, and coordinating all information activities of Departmental agencies. Agency personnel engaged in information activities were subject to the general direction and supervision of the Director of Information (Secretary's Memo. 1054, Dec. 10, 1942).

July 1, 1942.—The motion picture and exhibit work was transferred from the Extension Service to the Office of Information in accordance with provisions of an appropriation act (56 Stat. 667).

May 23, 1941.—The Secretary directed the establishment of a Departmental field information service to coordinate field information work (Secretary's Memo. 907, May 23, 1941).

May 1, 1925.—The Division of Publications, established in 1895, and the Press Service, established as an Office of Information in 1913, were combined in the Office of Information. The Director of Information was to coordinate publication and other informational policies and activities of the Department (Secretary's Memo. 528, Apr. 2, 1925).

Office of Management Appraisal and Systems Development

The Director, under the general direction of the Administrative Assistant Secretary, provides general direction, leadership, and coordination in the Department for management appraisals, systems design, automatic data processing, operations research, and related management techniques.

December 8, 1961.—The Office of Management Appraisal and Systems Development was established. It was assigned responsibility for initiating and providing leadership in programs for improvement of management practices, procedures, and work methods, assigned to the Office of Administrative Management, abolished the same day (Secretary's Memo. 1477, Dec. 8, 1961).

January 4, 1957.—The Office of Administrative Management was established to provide general direction, leadership, and coordination in organization, work methods, and management in the Department. Related functions were transferred from the Office of Personnel, Office of Plant and Operations, and the Office of Budget and Finance (Secretary's Memo. 1409, Jan. 7, 1957).

Management Operations Staff

The Management Operations Staff, reporting to the Director, Agricultural Economics, provides administrative management information, and related supporting and advisory services to the Economic Research Service, the Statistical Reporting Service, and the Staff Economists group. It includes the Divisions of Administrative Services, Budget and Finance, Information, and Personnel.

April 17, 1961.—The Management Operations Staff was established (Agricultural Economics Circular No. 2, Apr. 17, 1961).

National Agricultural Library

The Library acquires, records, and makes available publications containing information on subject fields covered by the Department. The Director is assisted by four Assistant Directors for Public Services, Field and Special Services, Technical Services, and Management Services. These supervise the Divisions of Lending, Reference, Field Services, Indexing and Documentation,

Acquisitions, Catalog and Records, Administration, and Coordination and Review.

March 23, 1962.—The Library of the Department of Agriculture was designated the National Agricultural Library (Secretary's Memo. 1496, Mar. 23, 1962).

February 26, 1942.—The Secretary directed the consolidation of all libraries and related units, authorized by Executive Order 9069, under the supervision of the Department Librarian (Secretary's Memo. 973, Supp. 1, Feb. 26, 1942).

February 25, 1939.—General oversight of all library work was assigned to the Department Librarian (Secretary's Memo. 808, Feb. 25, 1939).

June 25, 1864.—Provision was made in the Departmental appropriation act for the purchase of library materials (13 Stat. 155).

Office of Personnel

The Office of Personnel provides general direction, leadership, and coordination for the personnel management program of the Department. The Director is assisted by an Assistant Director for Program Operations and an Assistant Director for Program Development. The Office of Personnel consists of the Classification and Standards; Employee Development; Examination and Employment; Health, Safety, and Welfare; Investigations; Policies and Procedures; and Review and Adjudication Divisions.

December 8, 1961.—When the Office of Administrative Management was abolished, responsibility for all matters concerning organization and placement of functional responsibilities in the Department was assigned to the Office of Personnel (Secretary's Memo. 1477, Dec. 8, 1961).

January 7, 1957.—When the Office of Administrative Management was established to provide general direction, leadership, and coordination in organization, work methods, and management in the Department, pertinent functions were transferred from the Office of Personnel (Secretary's Memo. 1409, Jan. 7, 1957).

June 1, 1934.—A separate Office of Personnel was established when the Office of Personnel and Business Administration was abolished (Secretary's Memo. 646, May 17, 1934).

April 7, 1925.—Personnel functions formerly assigned to the Personnel Office, the Salary Classification Office, and the Office of Inspection were transferred to the newly-established Office of Personnel and Business Administration (Secretary's Memo. 530, Apr. 7, 1925).

Office of Plant and Operations

The Director of Plant and Operations exercises general responsibility for the Department for planning, developing, and administering the program for the management of: (1) Both Department-owned and leased real estate; and (2) supply functions. The Director is aided by three Assistant Directors. The Administrative Management, Records Management, and Service Operations Divisions report to the Assistant Director for Operations and Records. The Real Estate Management Division reports to the Assistant Director for Real Estate Management. The Procurement and Contract Management Division and Supply and Property Management Division report to the Assistant Director for Property, Procurement and Contract Management.

December 8, 1961.—Responsibility for (1) the establishment of Department procedures and standards for issuance of internal policy and procedural instructions, (2) the maintenance of Secretary's Memoranda and Administrative Regulations, and (3) programs in the field of paperwork, reports, and records management were assigned to the Office of Plant and Operations (Secretary's Memo. 1477, Dec. 8, 1961).

January 7, 1957.—Certain functions were transferred to the newly-established Office of Administrative Management (Secretary's Memo. 1409, Jan. 7, 1957).

January 30, 1956.—Division of Procurement and Property Management of the Office of Budget and Finance was transferred to Office of Plant and Operations (Secretary's Memo. 1392, Jan. 19, 1956).

December 15, 1941.—The Beltsville Research Center was placed under the direction and supervision of the Agricultural Research Administrator (Secretary's Memo. 960, Dec. 13, 1941).

March 1, 1939.—The Office of Plant and Operations succeeded the Division of Operation, which had been in the Office of the Secretary. The new office also included the Technical Advisory Board from the Office of Budget and Finance, and the Office of General Superintendent of the Beltsville Research Center (Secretary's Memo. 809, Feb. 27, 1939).

Office of Rural Areas Development

The Director, Office of Rural Areas Development, reporting to the Director, Agricultural Credit, is responsible for the general administration of the Rural Areas Development Program, as well as departmental activities under the Area Redevelopment Act. The Office was established on June 16, 1961 (Secretary's Memo. 1448, Rev., June 16, 1961).

Rural Electrification Administration

The Administrator, reporting to the Director, Agricultural Credit, is responsible for the rural electrification and telephone programs as provided for in the Rural Electrification Act of 1936, as amended. He is assisted by a Deputy Administrator and three Assistant Administrators for operations, telephone, and electric programs. The Assistant Administrator for Operations directs the work of the Controller's, Information Services, Personnel Management, and Program Services Divisions. The Assistant Administrator for the Electric Program directs the work of the Electric Distribution, Electric Standards, and Power Supply Divisions and Electric Area Offices. The Assistant Administrator for the Telephone Program directs the work of the Telephone Engineering and Operations, and Telephone Standards Divisions and Telephone Area Offices.

July 7, 1961.—The proposed reorganization of the Rural Electrification Administration was approved (J. P. Loftus to Norman M. Clapp, July 7, 1961). Clapp formally announced the changes on July 21 and personnel actions were effective August 20. The program functions of the Administration were assigned to the following divisions: Electric Distribution, Electric Standards, Power Supply, Controller's, Telephone Engineering and Operations, and Telephone Standards. There were, in addition, separate area offices for the electric and telephone programs.

November 25, 1960.—The redesignation of the Electric Operations and Loans Division as the Electric Operations Division was approved (J. P. Loftus to Robert T. Beall, Nov. 25, 1960).

July 14, 1959.—The Telephone Engineering and the Telephone Operations and Loans Divisions were combined in the Telephone Engineering and Operations Division. Five telephone area offices were established (J. P. Loftus to David A. Hamil, July 14, 1959).

January 25, 1957.—The establishment of the position of an Assistant Administrator for Administration was approved (Ernest C. Betts, Jr., to Kenneth L. Scott, Jan. 25, 1957).

January 26, 1954.—The Administrative and Loan Accounting Division had been established to continue certain functions of the Controller's Division, abolished September 2, 1953 (Henry C. Starns to T. Roy Reid, Jan. 26, 1954).

December 23, 1953.—The Telephone Loans Division was replaced by the Telephone Operations and Loans Division (Organization Chart, Dec. 23, 1953).

November 30, 1953.—The Electric Operations Division was replaced by the Electric Operations and Loans Division (Approved, T. Roy Reid to Ancher Nelson, Nov. 30, 1953).

September 2, 1953.—The Power, Operations, Engineering, Technical Standards, Controller's, and Program Analysis Divisions were abolished. The Electric Operations and the Electric Engineering Divisions were established (Memo. from the Administrator to all REA Employees, Sept. 1, 1953).

August 28, 1953.—A second Assistant Administrator, for the electric program, was appointed. The other Assistant Administrator was placed in charge of the telephone program.

January 16, 1953.—The establishment of the Program Analysis Division was approved (T. Roy Reid to Claude R. Wickard, Jan. 16, 1953).

July 1, 1952.—The Rural Electrification Administration was reorganized to meet the needs of the rapidly expanding telephone program. Two new divisions were set up—the Telephone Loans Division and the Telephone Engineering Division, staffed by personnel from the electric program. The field activities were consolidated and five Electric Area Distribution Area Offices were established in Washington. The following divisions were abolished: Applications and Loans, Accounting and Auditing, Management, and Engineering. In their place, the following divisions were established: Controller's, Engineering, and Operations (Statement, Claude R. Wickard, Apr. 29, 1952).

January 3, 1951.—Functions of the Finance Division were combined with the accounting and fiscal activities of the Administrative Services Division to form the Accounting and Auditing Division, a program division in part (Approved, N. R. Bear to C. R. Wickard, Jan. 3, 1951).

October 28, 1949.—The act providing for the rural telephone program was approved. The function was added to those of the electrical program in existing divisions.

June 8, 1948.—The establishment of the Power Division by the transfer of certain functions from the Management and Engineering Divisions was announced (REA Memo. to REA borrowers, June 8, 1948).

April 1, 1946.—The Cooperatives' Operations Division was abolished and the Management Division established in its place. The Design and Construction Division was renamed the Engineering Division (REA Announcement, Apr. 25, 1946).

After November 8, 1945.—One of the two positions of Deputy Administrator was not filled.

July 1, 1945.—An Assistant Administrator was appointed.

December 2, 1940.—The Divisions of Cooperative Relations, Utilization, and Engineering and Operations were abolished. New divisions established were: Applications and Loans, Technical Standards, Design and Construction, and Cooperatives' Operations (REA General Order 147, Dec. 2, 1940).

October 18, 1940.—A second position of Deputy Administrator was established (REA General Order 146, Oct. 16, 1940).

June 8, 1940.—The title of the Examining Division was changed to the Division of Cooperative Relations (REA General Order 134, June 8, 1940).

July 1, 1939.—The Rural Electrification Administration, established May 11, 1935, as an independent agency, became part of the Department of Agriculture (Reorganization Plan II, approved Apr. 3, 1939). Its program divisions included: Utilization, Engineering and Operations, Examining, and Finance.

Soil Conservation Service

The Administrator of the Soil Conservation Service, reporting through the Assistant Secretary for Federal-States Relations, formulates major policies for a national soil and water conservation program; provides national leadership in the broad field of soil and water conservation, land use, and flood prevention; and directs the administration of programs in these areas. The Administrator is assisted by Assistant Administrators for Field Services, Watersheds, Soil Survey, and Management. The Assistant Administrator for Field Services directs the work of the Farm and Ranch Planning, Plant Technology, and Engineering Divisions. The Assistant Administrator for Watersheds directs the work of the Watershed Planning and River Basins Divisions, and the Assistant Administrator for Soil Survey, the work of the Cartographic Division and the National Soil Survey as conducted by the staff specialists and directors. The Assistant Administrator for Management directs the work of the Administrative Services, Budget and Finance, Information, and Personnel Management Divisions.

March 15, 1961.—The Conservation Needs and Records Division was discontinued (SCS Advisory Notices 1283, 1285, Mar. 1, 1961).

November 1, 1958.—The Planning Division was abolished and the River Basin, Watershed Planning, Farm and Ranch Planning, and Conservation Needs and Records Branches were given divisional status (SCS Advisory Notice W-625, Oct. 29, 1958).

May 12, 1955.—The organization of the Soil Conservation Service was announced. The Administrator was assisted by three Assistant Administrators for field services, soil survey, and management. The field services work was assigned to research specialists, the Planning Division, the Plant Technology Division, and the Engineering Division. Soil Survey work was assigned to a staff for technical leadership and to the Cartographic Division (SCS Administrator's Memo. 84, May 12, 1955).

December 11, 1953.—Organization charts were approved redesignating the Conservation Needs and Records, Farm and Ranch Planning, Water Conservation Planning, and Design and Construction Divisions as branches. The Plant Technology Division was established.

November 2, 1953.—In the grouping of agencies, the Soil Conservation Service was included in the Federal-States Relations group. State offices were assigned greater responsibility for program formulation and execution and the regional offices were abolished (Secretary's Memo. 1320, Supp. 4, Nov. 2, 1953).

January 26, 1953.—The functions of the Conservation Division had been included in Soil Survey (Thomas B. Gardiner to N. R. Bear, Jan. 26, 1953).

January 21, 1953.—The Soil Conservation Service was included in the Research, Extension, and Land Use group (Secretary's Memo. 1320, Jan. 21, 1953).

January 16, 1953.—Revised organization charts for the Soil Conservation Service were approved, reflecting changes brought about by transfer of functions under Secretary's Memorandum 1318, October 14, 1952, to and from the Service. The Water Conservation and Disposal Practices, Erosion Control Practices, Water Conservation, and Irrigation Engineering Divisions were deleted (T. Roy Reid to Robert M. Salter, Jan. 16, 1953).

November 15, 1952.—Responsibility for all soil survey activities was placed in Soil Conservation Service (Secretary's Memo. 1318, Oct. 14, 1952).

January 23, 1952.—The Division of Irrigation and Water Conservation was redesignated the Division of Irrigation Engineering and Water Conservation (SCS Field Memo. 1143, Jan. 23, 1952).

January 22, 1952.—Organization realignment of Soil Conservation Service was approved. The Water Conservation Planning Division was established to take over most of the functions of the Water Conservation Division. The Farm and Ranch Planning Division and the Conservation Needs and Records

Division replaced the Project Plans Division and the Records and Reports Division. The Design and Construction Division was established. The Engineering Division was abolished. The functions of the Divisions of Agronomy, Biology, Forestry, Nursery, Range, and Land Management were combined in the Engineering Practices Division (T. Roy Reid to Robert M. Salter, Jan. 22, 1952; N. R. Bear to Robert M. Salter, Feb. 19, 1952).

July 18, 1950.—The abolition of the States Relations Division was approved (T. Roy Reid to H. H. Bennett, July 18, 1950).

December 16, 1947.—The reorganization of the Service, made necessary by the discontinuance of the Camp Operations Division and the abolition of the Land Acquisition and Sales Division, was approved (T. Roy Reid to H. H. Bennett, Dec. 16, 1947).

* *October 1, 1946.*—The Soil Conservation Service had the following divisions: Land Acquisition and Sales, States Relations, Agronomy, Biology, Cartographic, Engineering, Forestry, Nursery, Land Management, Project Plans, Range, Soil Conservation Surveys, Water Conservation, Erosion Control Practices, Farm Irrigation, and Water Conservation and Disposal Practices.

June 30, 1944.—The Water Conservation Division was established in accordance with General Departmental Circular 39, May 2, 1944.

July 6, 1942.—The Washington office included the Land Acquisition, States Relations, Agronomy, Range, Engineering, Biology, Nursery, Forestry, Land Management, Project Plans, Soil Conservation Surveys, Cartographic, Erosion Control Practices, Water Conservation and Disposal Practices, and Irrigation Divisions (SCS Field Memo. 1067, July 6, 1942).

May 5, 1942.—The functions of the Institutional Adjustments, Farm Planning and Management, Economic Surveys, and Program Surveys Divisions were assumed by the Project Plans Division. Functions of the Economics, Hillculture, Farm Drainage, Conservation Experiment Stations, Hydrologic, Sedimentation Studies, and Climatic and Physiologic Divisions were assumed by the new Erosion Control Practices and Water Conservation and Disposal Practices Divisions and the Research Specialists attached to the Office of the Chief of Research. The Camp Operations Division replaced the Office of Civilian Conservation Corps Operations. The Range Conservation Division was renamed the Range Division, and the Physical Surveys Division was redesignated the Soil Conservation Surveys Division (SCS Field Memo. 1061, May 5, 1942).

June 20, 1939.—The reorganization of the Service was announced to its field employees. This reflected changes by transfer to the Service of the Divisions of Irrigation and Drainage from the Bureau of Agricultural Engineering, January 2, 1939; work from the Forest Service, November 1, 1938; and of the Land Acquisition, Land Development, and Project Organization Divisions from the Bureau of Agricultural Economics, November 1, 1938. SCS included the following divisions: Land Management, Institutional Adjustments, Land Acquisition, Farm Planning and Management, Engineering, Agronomy, Forestry, Range Conservation, Nursery, Biology, Climatic and Physiographic, Sedimentation Studies, Irrigation, Hydrologic, Conservation Economics, Hillculture, Drainage, Conservation Experiment Stations, Physical Surveys, Economic Surveys, Cartography, Project Plans, States Relations, and Program Procedures.

Functions of the Divisions of Project Organization and Land Development were absorbed by the appropriate Divisions of Technical Operations, Lands and Program Coordination, Surveys and Project Plans, and Administration (SCS Field Memo. 795, June 20, 1939).

August 4, 1937.—The first soil conservation district was established.

July 7, 1937.—The establishment of the Division of Watershed and Conservation Surveys was announced (SCS Field Memo. 497, July 7, 1937).

February 10, 1936.—The program divisions included Research, Conservation Operations, and Cooperative Relations and Planning (SCS Field Memo. 253, Feb. 10, 1936).

November 5, 1935.—The Division of Cooperative Relations had been redesignated the Division of Cooperative Relations and Planning (SCS Field Memo. 158, Nov. 5, 1935).

July 30, 1935.—The first Soil Conservation Service region, the Southwest, was established (SCS Field Memo. 24, July 30, 1935).

April 1935.—The Division of Nurseries was established to administer the erosion control nurseries transferred from the Bureau of Plant Industry.

July 11, 1935.—The change in name of the Land Acquisition Division to the Land Acquisition and Sales Division was approved (T. Roy Reid to J. C. Dykes, July 11, 1935).

April 27, 1935.—The Soil Conservation Service was established as the successor of the Soil Erosion Service (Secretary's Memo. 673, Apr. 27, 1935).

March 25, 1935.—The Soil Erosion Service was transferred to the Department of Agriculture by an administrative order of the Federal Emergency Administrator of Public Works and approved by the President.

September 19, 1933.—The Soil Erosion Service was established in the Department of the Interior without formal departmental order.

Statistical Reporting Service

The Service is responsible for crop and livestock estimating programs, marketing surveys, and the development of statistical standards and techniques. The Administrator, reporting to the Director, Agricultural Economics, is assisted by a Deputy Administrator. Administrative services are furnished by the Management Operations Staff which also reports to the Director, Agricultural Economics.

May 29, 1961.—The Statistical Standards Division was redesignated the Standards and Research Division (Organization Chart, May 29, 1961).

April 4, 1961.—The Agricultural Estimates, Statistical Standards, and Field Operations Divisions were established in the Statistical Reporting Service (SRS General Notice 1, Apr. 4, 1961).

April 2, 1961.—The Statistical Reporting Service was established and assigned the functions of the former Agricultural Estimates and Statistical Standards Divisions, the Market Surveys Branch of the Market Development Research Division, and the Crop Reporting Board of the Agricultural Marketing Service (Secretary's Memo. 1446, Supp. 1, Apr. 3, 1961). Prior to the reorganization of 1953, agricultural estimating work had been in the Bureau of Agricultural Economics from 1922 to 1939 and from 1942 to 1953. From 1939 to 1942 this function was assigned to the Agricultural Marketing Service.

BUREAU OF CROP ESTIMATES

July 1, 1921.—The Bureau of Markets and the Bureau of Crop Estimates were combined to form the Bureau of Markets and Crop Estimates. On July 1, 1922, the Bureau of Markets and Crop Estimates was merged with the Office of Farm Management and Farm Economics in the Bureau of Agricultural Economics.

July 1, 1914.—The Bureau of Statistics was redesignated as the Bureau of Crop Estimates (38 Stat. 436).

1913-14.—The Bureau of Statistics was reorganized and the work set up in Divisions of Crop Reports and Crop Records.

1908.—The Editorial Division was renamed the Division of Reference and Research.

1908.—The Division of Foreign Markets was redesignated the Division of Production and Distribution.

1908.—The Miscellaneous Division was redesignated the Editorial Division.

July 1, 1903.—The Bureau of Statistics was established by the merger of the Division of Foreign Markets and the Division of Statistics. The work was organized under three divisions: Domestic Crop Reports, Foreign Markets, and Miscellaneous.

July 1, 1902.—The Division of Foreign Markets was established.

1863.—The Division of Statistics was established.

Interdepartmental Transfers of Major Agencies

Biological Survey, Bureau of

The Bureau of Biological Survey was established on July 1, 1905, to replace the Division of Biological Survey. On July 1, 1939, the Bureau was transferred to the Department of the Interior under Reorganization Plan II.

Commodity Credit Corporation

The Commodity Credit Corporation was organized on October 17, 1933, under the laws of the State of Delaware, as an independent agency of the United States Government. It was transferred to the Department of Agriculture on July 1, 1939.

Farm Credit Administration

The Farm Credit Administration was established on May 27, 1933, as an independent agency. It became part of the Department of Agriculture on July 1, 1939. It again became an independent agency on December 4, 1953.

Federal Surplus Commodities Corporation

The Corporation was established as the Federal Surplus Relief Corporation on October 4, 1933, under a charter granted by the State of Delaware. On November 18, 1935, the charter was amended changing the name to Federal Surplus Commodities Corporation and placing it under jurisdiction of the Secretary of Agriculture.

Food and Drug Administration

The Food, Drug, and Insecticide Administration was established on July 1, 1927, and assigned certain regulatory functions of the former Bureau of Chemistry. On July 1, 1930, it was redesignated the Food and Drug Administration. It was transferred to the Federal Security Agency on June 30, 1940.

Public Roads, Bureau of

The Bureau of Public Roads was established on July 1, 1918, superseding the Office of Public Roads and Rural Engineering. On July 1, 1939, the Bureau was transferred to the Federal Works Agency.

Resettlement Administration

The Resettlement Administration was established on April 30, 1935, and became a part of the Department of Agriculture on January 1, 1937. Subsequently, it was redesignated the Farm Security Administration.

Rural Electrification Administration

The Rural Electrification Administration was established as an independent agency on May 11, 1935. It was transferred to the Department of Agriculture, on July 1, 1939, under Reorganization Plan II.

Soil Erosion Service

The Soil Erosion Service was established in the Department of the Interior on September 19, 1933. It was transferred to the Department of Agriculture on March 27, 1935, and reestablished as the Soil Conservation Service on April 27, 1935.

Weather Bureau

On October 1, 1890, Congress authorized the establishment of the Weather Bureau in the Department of Agriculture. The weather service of the Signal Corps of the Army was transferred to the new bureau on July 1, 1891. On June 30, 1940, the Weather Bureau was transferred to the Department of Commerce.

A Chronology of Major Events Related to the USDA

1796. December 7. President George Washington recommended the creation of a national board of agriculture.
1803. George Washington Parke Custis inaugurated, at his Arlington, Va., estate, yearly competitions in sheep shearing and sheep and wool exhibitions.
1810. *The Agricultural Museum*, first farm periodical, began publication.
1811. Berkshire Agricultural Society, which sponsored fairs for local farmers, was organized under the leadership of Elkanah Watson.
1819. March 26. Secretary of Treasury instructed consuls to collect seeds, plants, and agricultural inventions.
April 2. *The American Farmer*, first farmers' periodical to attain wide circulation, began publication.
1825. October 26. Erie Canal completed.
1836. July 4. Patent Office established and Henry L. Ellsworth appointed Commissioner.
1837. Patent Office began distribution of foreign seeds and plants at personal expense of its commissioner.
1839. March 3. Congress appropriated \$1,000 from the Patent Office fund for "the collection of agricultural statistics, and for other agricultural purposes."
1849. March 3. Department of the Interior created and Patent Office transferred to it.
1852. June 24. The United States Agricultural Society was organized.
1855. February 12. Michigan passed legislation providing for the establishment of the Michigan Agricultural College.
February 23. Pennsylvania passed legislation providing for the establishment of Pennsylvania Farmers' High School, later Pennsylvania State College and now Pennsylvania State University.
1856. March 6. Maryland passed legislation to aid the establishment of Maryland Agricultural College.
1862. May 15. Law establishing the Department of Agriculture was signed by President Abraham Lincoln.
May 20. Homestead Act was approved by President Lincoln.
July 2. President Lincoln approved the Morrill Land-Grant College Act.
1867. The Patrons of Husbandry, later known as the National Grange, organized.
1869. A botanist was appointed in the Department.
1875. First State agricultural experiment station established at Wesleyan University, Middletown, Conn.
1877. March 3. U.S. Entomological Commission established to study grasshoppers.
1887. March 2. Hatch Experiment Station Act approved, providing Federal grants to States for agricultural experimentation.
October. Association of American Agricultural Colleges and Experiment Stations organized.
1889. February 9. Department of Agriculture raised to cabinet status.

1890. August 30. Meat Inspection Act approved, authorizing inspection of salted pork and bacon and live animals intended for exportation, and the quarantine of imported animals.
1891. March 3. An act of Congress authorized the President to establish forest reserves from the public domain.
1896. Rural free delivery system for handling mail started.
1898. Industrial Commission appointed to collect information and recommend legislation to meet the problems of agriculture, labor, and capital.
1902. First Forest Reserve created by Congress.
Farmers Union (Farmers Educational and Cooperative Union of America) organized.
- June 17. Reclamation Act approved.
1903. Seaman A. Knapp directed a privately financed demonstration in improved cotton production methods in Terrell, Tex.
1904. Railroads ran special trains promoting improved farming.
1905. International Institute of Agriculture established.
March 3. Livestock Quarantine Act was approved.
1906. June 29. The 28-Hour Law, providing for humane care of livestock in interstate shipment, was approved.
June 30. Food and Drugs Act approved.
June 30. New Meat Inspection Act approved.
1907. July 1. Forest Reserves were renamed National Forests.
1908. May 13-15. White House Conference on Conservation.
August 10. Country Life Commission organized by President Theodore Roosevelt.
1910. April 26. Insecticide and Fungicide Act was approved.
1911. March 1. Weeks law approved providing for Federal purchase of forest lands to protect the watersheds of navigable streams.
1912. August 20. Plant Quarantine Act was approved.
August 24. Parcel post system established by act of Congress.
1913. March 4. Congress provided for marketing and distribution studies.
March 4. Virus-Serum Toxin Act approved.
December 23. Federal Reserve Act approved.
1914. May 8. Smith-Lever Act formalized cooperative agricultural extension work.
August 1. World War I began in Europe.
August 18. Cotton Futures Act, first major attempt to regulate marketing of farm products, approved.
1916. July 11. Federal Highway Act approved, providing for cooperation with States in construction of rural post roads.
July 17. The Federal Farm Loan Act was approved.
August 11. Cotton Futures Act reenacted.
August 11. United States Warehouse Act approved.
August 11. Grain Standards Act approved.
August 31. Standard Container Act approved.
1917. February 23. Smith-Hughes Vocational Education Act approved.
April 6. The United States entered World War I.
August 10. Food and Fuel Control Act approved.
August 10. President Wilson established the Food Administration.
August 10. Food Production Act approved.
August 30. President Wilson fixed the minimum price of wheat at \$2.20 a bushel, raised to \$2.26 on June 21, 1918.
September 1. Grain Corporation of the Food Administration began operations.
November 13. Food Administration announced supports of hog prices at specified level in relation to corn, but did not maintain this price.
1918. July 1. Sugar Equalization Board incorporated to allocate and distribute supplies of sugar.
December 23. All food regulations suspended by Food Administration.

1920. March 3. American Farm Bureau Federation formally organized with ratification of constitution.
May. Government guarantees on wheat prices ended.
Farm prices declined sharply in the summer.
1921. August 15. Packers and Stockyards Act approved.
1922. January 23-27. National Agricultural Conference met in Washington.
February 18. Capper-Volstead Act, exempting cooperatives from anti-trust laws, approved.
June 3. Federal Reserve Act amended to provide agricultural representation on Federal Reserve Board.
September 21. Grain Futures Act approved.
1923. Congressional distribution of seeds discontinued.
March 4. Agricultural Credits Act approved.
1924. June 7. The Clarke-McNary law extended the Federal purchase policy of the Weeks law of 1911.
November 7. President Coolidge appointed a nine-man President's Agricultural Conference.
1925. February 24. Purnell Act authorized funds for research by agricultural experiment stations on economic and social problems of agriculture.
1928. May 22. McSweeney-McNary Act approved, providing for a program of forest research.
1929. National Chamber of Agricultural Cooperatives (later known as the National Council of Farmer Cooperatives) was established.
June 15. Agricultural Marketing Act, establishing Federal Farm Board, approved.
1930. February 10. Grain Stabilization Corporation chartered under auspices of Federal Farm Board.
June 5. Cotton Stabilization Corporation chartered under auspices of Federal Farm Board.
June 10. The Perishable Agricultural Commodities Act was approved.
December 20. Drought Relief Act passed.
1931. National Conference on Land Utilization called by Secretary of Agriculture and Executive Committee of Association of Land-Grant Colleges and Universities.
1933. March 10. Farm leaders conference met in Washington.
March 31. Act to provide for relief of unemployment through performance of useful public work led to establishment of Civilian Conservation Corps.
April 17. The first Civilian Conservation Corps camp, Camp Roosevelt in George Washington National Forest, was occupied.
May 12. Emergency Farm Mortgage Act approved.
May 12. Agricultural Adjustment Act, authorizing voluntary production adjustment and marketing agreements was approved.
May 12. The Federal Emergency Relief Act, creating the Federal Emergency Relief Administration, approved.
May 27. Farm Credit Administration established by Executive Order 6084, March 27, 1933.
June 16. National Industrial Recovery Act approved.
September 19. The Soil Erosion Service was created in the Department of the Interior.
October 4. The Federal Surplus Relief Corporation was established to carry on diversion of agricultural commodities for relief purposes.
October 10. First soil-erosion control project of Soil Erosion Service established in Coon Valley, Wis.
October 17. The Commodity Credit Corporation was established.
1934. January 31. Federal Farm Mortgage Act approved.
February 23. Crop Production Loans Act, providing loans to farmers for crop production and harvesting, approved.

- April 1. Rural rehabilitation program initiated by Federal Emergency Relief Administration.
- April 7. Jones-Connally Act was approved.
- April 21. Bankhead Cotton Control Act approved.
- May 9. Jones-Costigan Sugar Act approved.
- May 11. First great duststorm, originating in the "Dust Bowl" area of Great Plains region.
- June 12. Reciprocal Trade Agreements Act approved.
- June 28. Kerr-Smith Tobacco Control Act approved.
- June 28. Frazier-Lemke Farm Bankruptcy Act approved.
1935. Federal assistance for school lunch programs was provided by the Federal Emergency Relief Administration. Loans had been made by the Reconstruction Finance Corporation to several towns for payment of labor to prepare and serve school lunches during 1932 and 1933.
- Medical care services program developed by Resettlement Administration.
- March 18. De Rouen Rice Act approved.
- April 27. Congress declared soil erosion a national menace in act directing the Department to establish a Soil Conservation Service.
- May 11. The Rural Electrification Administration was established.
- May 27. Frazier-Lemke Farm Bankruptcy Act invalidated by Supreme Court.
- June 29. Bankhead-Jones Act, providing for the expansion of research, approved.
- August 23. Tobacco Inspection Act approved.
- August 24. Amendments to the Agricultural Adjustment Act included a provision, Section 32, appropriating an amount equal to 30 percent of the customs receipts to encourage domestic consumption and export of agricultural commodities and a provision authorizing the use of marketing orders.
- August 29. The Fulmer Act, providing for Federal aid in the purchase of lands for State forest purposes, was approved.
1936. January 6. Agricultural Adjustment Act invalidated by Hoosac Mills decision.
- January 10-11. Farm leaders met to help the Department of Agriculture draw up new farm program.
- February 29. Soil Conservation and Domestic Allotment Act approved.
- May 20. Rural Electrification Act approved. Previous activities carried on under Emergency Relief Appropriation Act of 1935.
- June 15. The Commodity Exchange Act was approved.
- June 22. The Omnibus Flood Control Act approved.
- July 22. President Roosevelt appointed an interdepartmental Great Plains Drought Area Committee, later succeeded by the Great Plains Committee.
- September 19. President Roosevelt appointed a crop insurance committee.
- November 16. President Roosevelt established a Special Committee on Farm Tenancy.
1937. February 27. President Roosevelt sent letter to State Governors recommending legislation providing for a soil conservation districts program.
- May 18. The Norris-Doxey Cooperative Farm Forestry Act was approved, providing for increased technical aid to farmowners for the sound management of their woodlands.
- June 3. Agricultural Marketing Agreement Act was approved.
- July 22. Bankhead-Jones Farm Tenant Act approved.
- August 4. The first soil conservation district in the United States was organized.
- August 28. Water Facilities Act approved.

- September 1. Sugar Act, replacing the Jones-Costigan Sugar Act, was approved.
1938. February 16. Agricultural Adjustment Act of 1938 was approved.
- June 21. Price Adjustment Act of 1938 provided funds for parity payments.
- June 25. Federal Food, Drug, and Cosmetic Act approved.
- July 8. The Mount Weather agreement was approved.
1939. May 3. Congress authorized a program to lend agricultural experts and scientists to other American Republics.
- July 1. Agricultural attachés and their local staffs were transferred to the Department of State.
- September 1. Outbreak of World War II in Europe.
1940. February. Allied Purchasing Commission arrived in Washington.
- May 28. National Defense Advisory Commission established by President Roosevelt.
- June 26. Executive Order 8455 gave the Department general authorization for postwar planning.
1941. March 11. Lend-Lease Act approved.
- April 11. Office of Price Administration and Civilian Supply established.
- May 7. Secretary Wickard announced the formal organization of the Joint Anglo-American Food Committee.
- May 26. Congress raised minimum loan rates for basic commodities.
- May 26-28. National Nutrition Conference, sponsored by National Research Council, met.
- July 1. Steagall amendment directed the Secretary of Agriculture to support the price of those nonbasic commodities for which he requested increased production.
- October 28. Office of Lend-Lease Administration was established.
- December 7. Pearl Harbor.
- December 28. First War Powers Act approved.
1942. January 16. The War Production Board was established.
- January 30. Emergency Price Control Act approved.
- March 5. Emergency Rubber Production Act approved.
- April 13. Sugar quota system suspended.
- April 20. Sugar rationing begun.
- June 5. The Foods Requirements Committee was established.
- June 9. Establishment of Combined Food Board announced by President Roosevelt and Prime Minister Churchill.
- July 23. Migrant Labor Agreement with Mexico signed.
- October 3. The Office of Economic Stabilization was established.
- November 13. Tydings amendment to Selective Service Act made mandatory deferment of farm labor "necessary to and regularly engaged in an agricultural occupation."
- December 5. The President delegated increased responsibility over food to the Secretary of Agriculture by Executive Order 9280.
1943. January 23. Responsibility for recruiting, placing, transferring, and utilizing agricultural workers transferred from the United States Employment Service to the Department of Agriculture.
- March 1. Rationing of fruits and vegetables under the point system begun.
- March 26. Food Production and Distribution Administration, later War Food Administration, established within Department of Agriculture by Executive order.
- April 8. President Roosevelt issued the "Hold the Line" order on prices.
- May 18-June 3. Hot Springs, Va., Conference drew up plan for United Nations Food and Agriculture Organization.
- May 27. The Office of War Mobilization was established.
- November 9. United Nations Relief and Rehabilitation Administration was established by international agreement.

1944. June 22. The Servicemen's Readjustment Act, making World War II veterans eligible for benefits of Bankhead-Jones Farm Tenant Act was approved.
 December 23. Amendments to the Federal Crop Insurance Act, providing for an enlarged crop insurance program, were approved.
1945. May 7. Surrender of Germany.
 June 6. Bankhead-Flannagan Act, providing for expansion of county extension work, approved.
 June 30. The War Food Administration was terminated and the functions were transferred back to the Secretary of Agriculture.
 August 14. Surrender of Japan.
 August 30. President Truman stated, in a letter to Congress, that lend-lease programs were being terminated.
 October 16. The Food and Agriculture Organization of the United Nations was formally organized.
 November 24. Food rationing ended on all products except sugar.
1946. February 6. President Truman announced program to meet critical and urgent world food needs.
 June 4. National School Lunch Act approved.
 June 20. International Emergency Food Council established as a successor to the Combined Food Board.
 August 14. Research and Marketing Act approved.
 September. Cabinet Committee on World Food Problems appointed.
 October 24. All food products except sugar, sirups, and rice removed from price control.
 December 31. President proclaimed cessation of hostilities of World War II.
1947. February 28. Congress authorized a cooperative project with Mexico to eradicate foot-and-mouth disease in that country.
 March 31. Sugar Control Extension Act of 1947 transferred authority to allocate, ration, and control price of sugar to the Department of Agriculture.
 May 29. Functions relating to enforcement of agricultural wage and salary regulations under the Stabilization Act of 1942 were transferred to the Secretary of the Treasury.
 June 25. The Federal Insecticide, Fungicide, and Rodenticide Act, replacing the Insecticide Act of 1910, was approved.
 June 25. Forest Pest Control Act approved.
 September 25. Citizens Food Committee appointed by President Truman to advise on food conservation.
 October 30. General Agreement on Tariffs and Trade signed.
 November 28. Wartime suspension of sugar quota system was terminated.
 December 17. Foreign Aid Act of 1947 was approved.
1948. April 3. The Foreign Assistance Act, creating the Economic Recovery Program, was approved.
 July 3. Agricultural Act of 1948 was approved.
 December 31. The Department's obligation under the Steagall amendment to support specified nonbasic commodities at 90 percent of parity terminated.
1949. June 13. International Wheat Agreement approved by the Senate.
 July 15. The Housing Act of 1949, authorizing loans for farm housing, was approved.
 October 28. Rural telephone program authorized by amendment to the Rural Electrification Act.
 October 31. Agricultural Act of 1949 was approved, replacing the act of 1948.

1950. June 3. President's Commission on Migratory Labor was established by Executive Order 10129.
- June 25. North Korean Communist forces invaded South Korea.
- September 8. Defense Production Act approved and on September 9, the Secretary of Agriculture was delegated authority with respect to food, farm equipment, and commercial fertilizer.
- September 13. National Production Authority established within the Department of Commerce.
- December 16. President Truman declared the existence of a state of national emergency.
1951. January 24. An Office of Price Stabilization was created within the Economic Stabilization Agency.
- July 31. Defense Production Act was extended.
- September 8. Peace treaty with Japan signed.
- October 19. President Truman proclaimed the termination of a state of war between the United States and the Government of Germany.
1952. June 30. Public Law 429, 82d Congress, amended and extended the Defense Production Act of 1950.
1953. February 6. All price and distribution controls on livestock and meat removed.
- March 27. All sales of all commodities and services exempted from price control.
- June 30. Defense Production Act amendments extended certain provisions of the act.
- July 20. National Agricultural Advisory Commission established on a permanent basis.
- July 27. Armistice ending the Korean war signed.
1954. July 10. Agricultural Trade Development and Assistance Act (Public Law 480) approved.
- August 4. The Watershed Protection and Flood Prevention Act approved.
- August 28. Agricultural Act of 1954 established flexible price supports and commodity set-asides, and provided support for wool through payments.
- September 1. Social Security Act amended to extend coverage to farm operators.
- September 1. Jurisdiction over agricultural attachés was transferred from the Department of State to the Department of Agriculture.
1956. May 28. Agricultural Act of 1956 included authorization for Soil Bank program and established Commission on Increased Industrial Use of Agricultural Products.
- August 7. Legislation approved providing for Great Plains Conservation program.
1957. August 28. Poultry Inspection Act authorized compulsory Federal inspection of poultry sold in interstate commerce.
1958. June 13. The Appropriation Act for 1959 prohibited the use of newly appropriated funds for the acreage reserve of the Soil Bank program for 1959 crops.
- August 27. Humane Slaughter Act approved.
- August 28. Agricultural Act of 1958, including provisions for changes in the price-support programs for cotton and corn, approved.
1959. September 21. Legislation authorizing the Secretary of Agriculture to carry out a food stamp program was approved.
1960. Legal authority for making new contracts under the conservation reserve of the Soil Bank program expired at the end of the calendar year.
- June 12. Legislation, providing for multiple use and sustained yield of forest resources and lands, was approved.

1961. January 21. The President directed the Secretary of Agriculture to expand and improve the program of food distribution to needy people.
January 26. Conference of farm leaders and farm organizations on Policies and Programs for American Agriculture met.
March 22. Feed Grain Act approved.
May 1. The Area Redevelopment Act was approved.
August 8. Agricultural Act for 1961 approved.

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